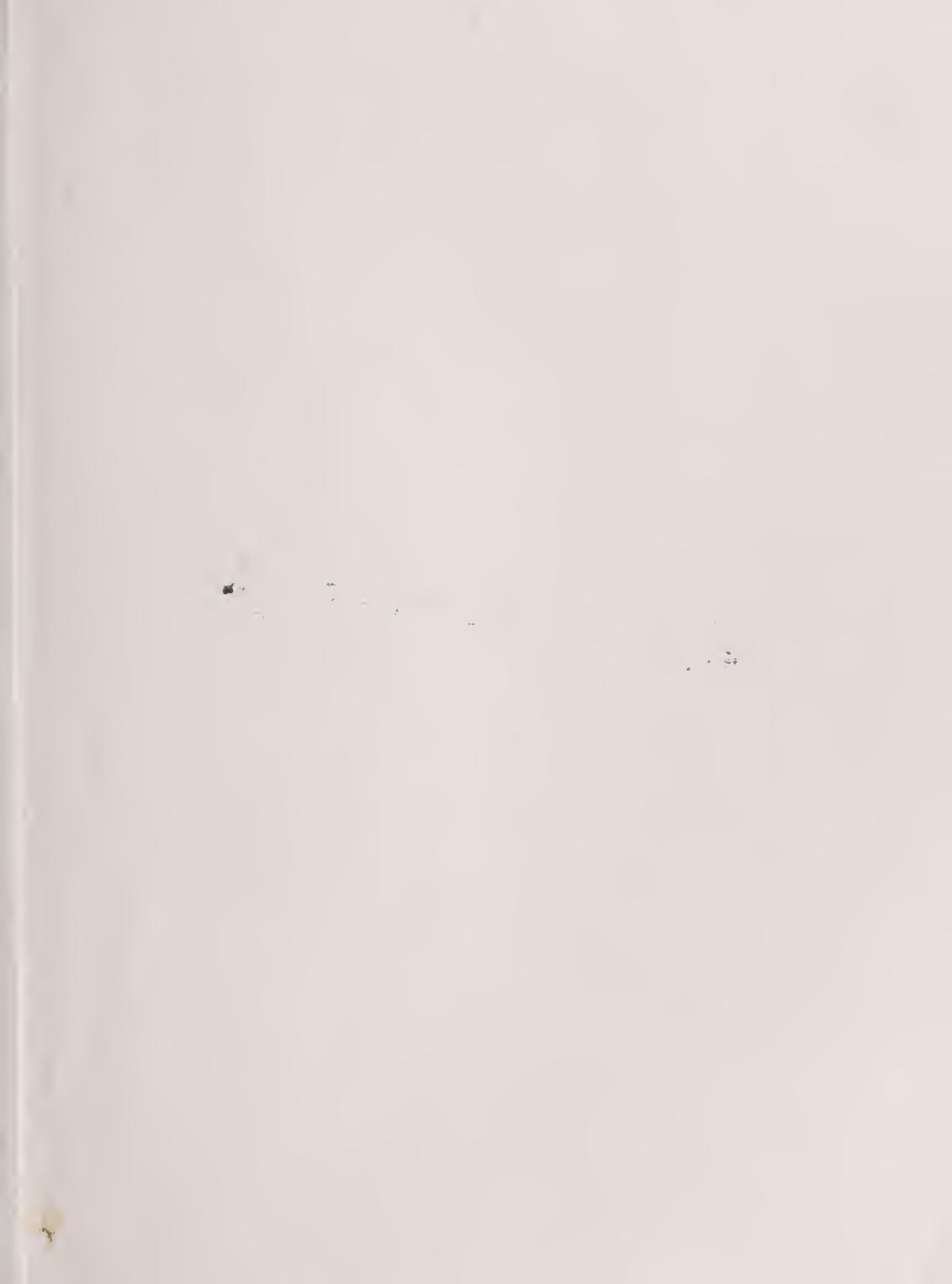


J.L.C.D. LIBRARY





STATE OF CALIFORNIA
The Resources Agency
Department of Water Resources

BULLETIN No. 130-75

HYDROLOGIC DATA: 1975
Volume IV: SAN JOAQUIN VALLEY

Copies of this bulletin at \$4.00 each may be ordered from:

State of California
DEPARTMENT OF WATER RESOURCES
P.O. Box 388
Sacramento, California 95802

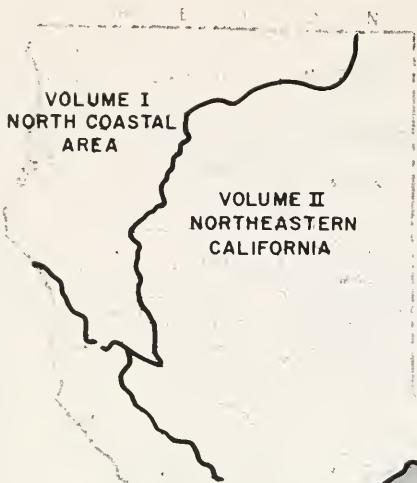
Make checks payable to STATE OF CALIFORNIA
California residents add sales tax.

OCTOBER 1976

CLAIRE T. DEDRICK
Secretary for Resources
The Resources Agency

EDMUND G. BROWN JR.
Governor
State of California

RONALD B. ROBIE
Director
Department of Water Resources



VOLUME II
NORTHEASTERN
CALIFORNIA

VOLUME III
CENTRAL
COASTAL
AREA

VOLUME IV
SAN JOAQUIN
VALLEY

VOLUME V
SOUTHERN CALIFORNIA

BULLETIN No. 130
HYDROLOGIC DATA
AREAL COVERAGE OF VOLUMES

Each Volume Contains

- Appendix A: Climatological Data
- Appendix B: Surface Water Measurements
- Appendix C: Ground Water Measurements
- Appendix D: Surface Water Quality
- Appendix E: Ground Water Quality

This Volume

FOREWORD

The data collection programs of the Department of Water Resources have been designed to supplement the activities of other agencies to satisfy specific needs of the State. Bulletin No. 130-75 presents useful, comprehensive, accurate, and timely hydrologic data which are prerequisites for monitoring environmental conditions as well as effective planning, design, construction, and operation of water facilities.

The Bulletin No. 130 series has been published annually in five volumes since 1963. Each volume presents hydrologic data for one of five reporting areas of the State. These areas are delineated on the map to the left.

This Bulletin No. 130-75 is the last of this series to be published. It is to be replaced with a statewide Bulletin 130, "Hydrologic Data Index", which will show what data are available and where they may be obtained.



Ronald B. Robie, Director
Department of Water Resources
State of California

CONVERSION FACTORS

English to Metric System of Measurement

<u>Quantity</u>	<u>English unit</u>	<u>Multiply by</u>	<u>To get metric equivalent</u>
Length	inches (in)	25.4	millimetres (mm)
	feet (ft)	.0254	metres (m)
	miles (mi)	.3048	metres (m)
Area	square inches (in^2)	6.4516×10^{-4}	square metres (m^2)
	square feet (ft^2)	.092903	square metres (m^2)
	acres	4046.9	square metres (m^2)
		.40469	hectares (ha)
		.40469	square hectometres (hm^2)
Volume	square miles (mi^2)	.0040469	square kilometres (km^2)
		2.590	square kilometres (km^2)
Volume/Time (Flow)	gallons (gal)	3.7854	litres (l)
		.0037854	cubic metres (m^3)
	million gallons (10^6 gal)	3785.4	cubic metres (m^3)
	cubic feet (ft^3)	.028317	cubic metres (m^3)
	cubic yards (yd^3)	.76455	cubic metres (m^3)
	acre-feet (ac-ft)	1233.5	cubic metres (m^3)
		.0012335	cubic hectometres (hm^3)
Mass		1.233×10^{-6}	cubic kilometres (km^3)
	cubic feet per second (ft^3/s)	28.317	
		.028317	litres per second (l/s)
	gallons per minute (gal/min)	.06309	cubic metres per second (m^3/s)
		6.309×10^{-5}	litres per second (l/s)
Power	million gallons per day (mgd)	.043813	cubic metres per second (m^3/s)
	pounds (lb)	.45359	kilograms (kg)
	tons (short, 2,000 lb)	.90718	tonne (t)
Pressure		907.18	kilograms (kg)
	horsepower (hp)	0.7460	kilowatts (kW)
Temperature	pounds per square inch (psi)	6894.8	pascal (Pa)
Temperature	Degrees Fahrenheit ($^{\circ}F$)	$\frac{t_F - 32}{1.8} = t_C$	Degrees Celsius ($^{\circ}C$)

TABLE OF CONTENTS

	<u>Page</u>
AREAL COVERAGE OF VOLUMES	ii
FOREWORD	iii
METRIC CONVERSION TABLE	iv
ORGANIZATION, DEPARTMENT OF WATER RESOURCES	vii
ACKNOWLEDGMENTS	ix
ABSTRACT	x

APPENDIXES

Appendix A: CLIMATOLOGICAL DATA	1
Introduction	3

FIGURES

<u>Figure Number</u>		
A-1	Climatological Observation Stations	4

TABLES

<u>Table Number</u>		
A-1	Index of Climatological Stations	11
A-2	Precipitation Data	18
A-3	Storage Gage Precipitation Data	22
Appendix B: SURFACE WATER MEASUREMENTS		23
Introduction		25
Alphabetical Index to Tables		26
Hydrographic Area and Stream Basin Index to Surface Water Measurement Stations		27
Unimpaired Runoff		34
Daily Mean Discharge		37
Diversions		93
Daily Mean Gage Heights		100

FIGURES

<u>Figure Number</u>		
B-1	Surface Water Measurement and Quality Surveillance Stations	28

TABLES

<u>Table Number</u>		
B-1	Annual Unimpaired Runoff	35
B-2	Monthly Unimpaired Runoff	36
B-3	Daily Mean Discharge	38
B-4	Diversions -- San Joaquin River, Fremont Ford Bridge to Gravelly Ford	94
B-5	Diversions and Acreage Irrigated -- Eastside Canals and Irrigation Districts	95
B-6	Deliveries from Central Valley Project Canals	96
B-7	Deliveries from California Aqueduct	98
B-8	Imports and Exports	99
B-9	Daily Mean Gage Heights	101
B-10	Corrections and Revisions to Previously Published Reports	118

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Appendix C: GROUND WATER MEASUREMENTS	123
Introduction	125
FIGURES	
Figure Number	
C-1 Fluctuation of Average Water Level in Selected Areas	126
C-2 Fluctuation of Water Levels in Selected Wells	132
TABLES	
Table Number	
C-1 Change in Average Ground Water Level in Districts or Areas in the San Joaquin Valley	148
C-2 Change in Average Ground Water Level from 1921 to 1951 and 1951 to 1975 in 18 Ground Water Areas in the San Joaquin Valley	151
C-3 Ground Water Levels at Wells	152
Appendix D: SURFACE WATER QUALITY	161
Introduction	163
TABLES	
Table Number	
D-1 Sampling Station Data and Index for Surface Water	164
D-2 Mineral Analyses of Surface Water	167
D-3 Minor Element Analyses of Surface Water	181
D-4 Miscellaneous Constituents of Surface Water	183
D-5 Nutrient Constituents of Surface Water	192
D-6 Pesticides in Surface Water	199
Appendix E: GROUND WATER QUALITY	201
Introduction	203
TABLES	
Table Number	
E-1 Mineral Analyses of Ground Water	204
E-2 Minor Element Analyses of Ground Water	231
E-3 Supplemental Minor Element Analyses of Ground Water	240
PLATES (Bound at end of volume)	
Plate Number	
1 Ground Water Areas and Selected Observation Wells	
2 Map of Selected Ground Water Areas in San Joaquin Valley and Profiles Along Section A-A' Showing Ground Water Levels in 1921, 1951 and 1975	
3 Lines of Equal Elevation of Water in Wells, San Joaquin Valley, Spring 1975	
4. Lines of Equal Change of Water Levels in Wells, Pressure Surface and Unconfined Aquifers, San Joaquin Valley, Spring 1970 to Spring 1975	

State of California
EDMUND G. BROWN JR., Governor

The Resources Agency
CLAIRE T. DEDRICK, Secretary for Resources

Department of Water Resources
RONALD B. ROBIE, Director

ROBIN R. REYNOLDS
Deputy Director

GERALD H. MERAL
Deputy Director

ROBERT W. JAMES
Deputy Director

CHARLES R. SHOEMAKER
Assistant Director

SAN JOAQUIN DIVISION

Carl L. Stetson Chief
Floyd I. Bluhm Chief, Water Supply and Utilization Branch

This bulletin was prepared under
the direction of

Cledith L. Chastain Chief, Water Supply Section

by

Keithal B. Dick Supervisor, Surface Water Unit
John Gostanian Supervisor, Ground Water Unit

Assisted by

Donald E. Massa	Assistant Engineer, Water Resources
Frank L. Gress	Water Resources Technician II
James H. Davies	Water Resources Technician I
Dennis C. Williams	Water Resources Technician I
James H. Williams	Water Resources Technician I
Donald W. Colburn	Water Resources Technician I
Donald M. Armas	Water Resources Technician I
Don H. Takemoto	Junior Engineering Technician B
Robert L. Hicks	Junior Engineering Technician B
Gary J. Riddle	Junior Engineering Technician B
Roxie Esparza	Stenographer B

Reviewed and coordinated by Division of Planning
Environmental Quality Branch
Water Resources Evaluation Section

ACKNOWLEDGMENTS

In the collection of data for this bulletin, the Department has been aided by various public and private agencies and by many private citizens. This cooperation is gratefully acknowledged, and it is especially fitting to commend the following agencies:

National Weather Service
U. S. Bureau of Reclamation
U. S. Army Corps of Engineers
U. S. Geological Survey
State Department of Health
City and County of San Francisco
City of Modesto
Kern County Water Agency
Kern County Canal and Water Company
Buena Vista Water Storage District
Modesto Irrigation District
Turlock Irrigation District
Oakdale Irrigation District
Merced Irrigation District
Fresno Irrigation District
Kings River Water Association
Central California Irrigation District
Tule River Association
Fresno County Health Department
Kern County Health Department
Tulare County Health Department
Kern County Parks and Recreation Department
Kings County Water District

ABSTRACT

Report contains tables showing data on climate, surface water flow, ground water levels, and surface and ground water quality in the San Joaquin Valley for the 1974-75 water year. Figures show location of climatological, surface water, and surface water quality measurement stations; fluctuation of water levels in selected wells and areas; and electrical conductance at selected stations. Plates show lines of equal elevation of water in wells, spring 1975; profile of ground water levels; ground water areas; and well locations.

APPENDIX A
CLIMATOLOGICAL DATA

INTRODUCTION

This appendix summarizes monthly precipitation data in the San Joaquin Valley from July 1, 1974, to September 30, 1975, for stations which are not published by the National Weather Service. Also presented are annual precipitation values from 33 storage gages.

Figure A-1 shows the general location of all climatological observation stations in the San Joaquin Valley for which data are available in department files or files of the National Weather Service.

Table A-1 presents an explanation of column headings and code symbols used, and an index of climatological stations as shown on Figure A-1.

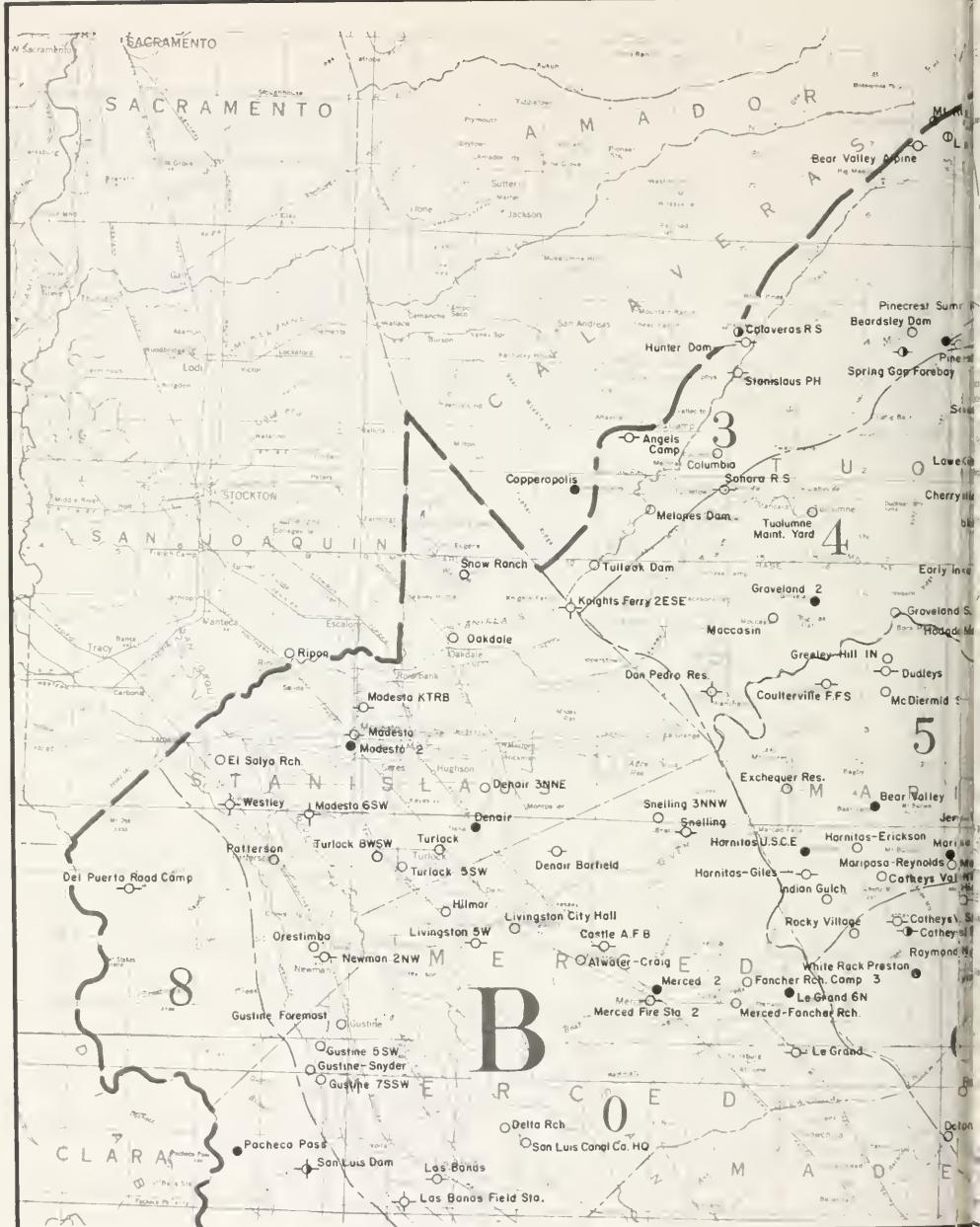
Table A-2 presents monthly precipitation data on 162 of the stations shown in the index.

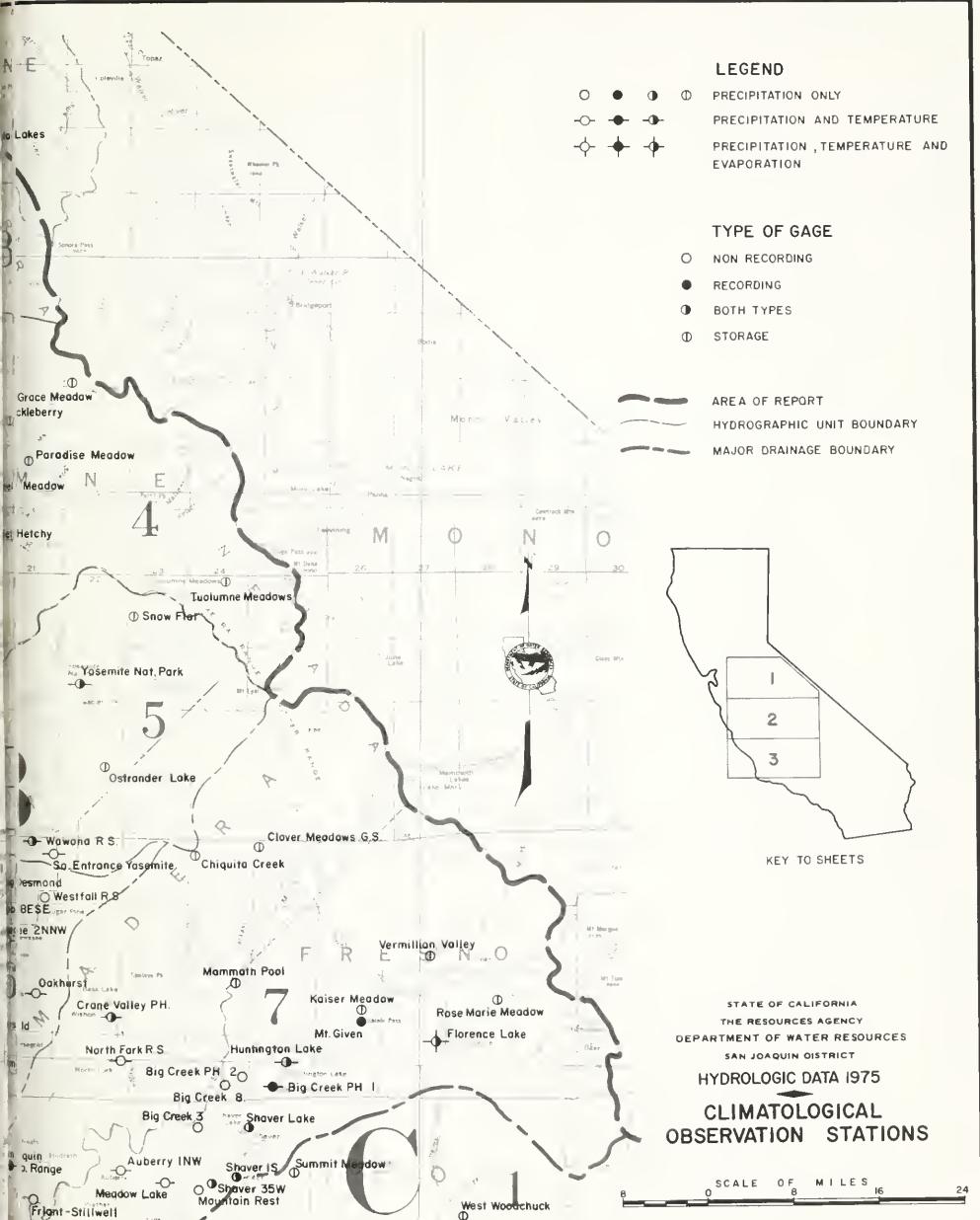
Table A-3 presents storage gage precipitation data.

Precipitation data for stations shown in the index as still active and not published in this appendix are either published by the National Weather Service, or were not available at time of this publication.

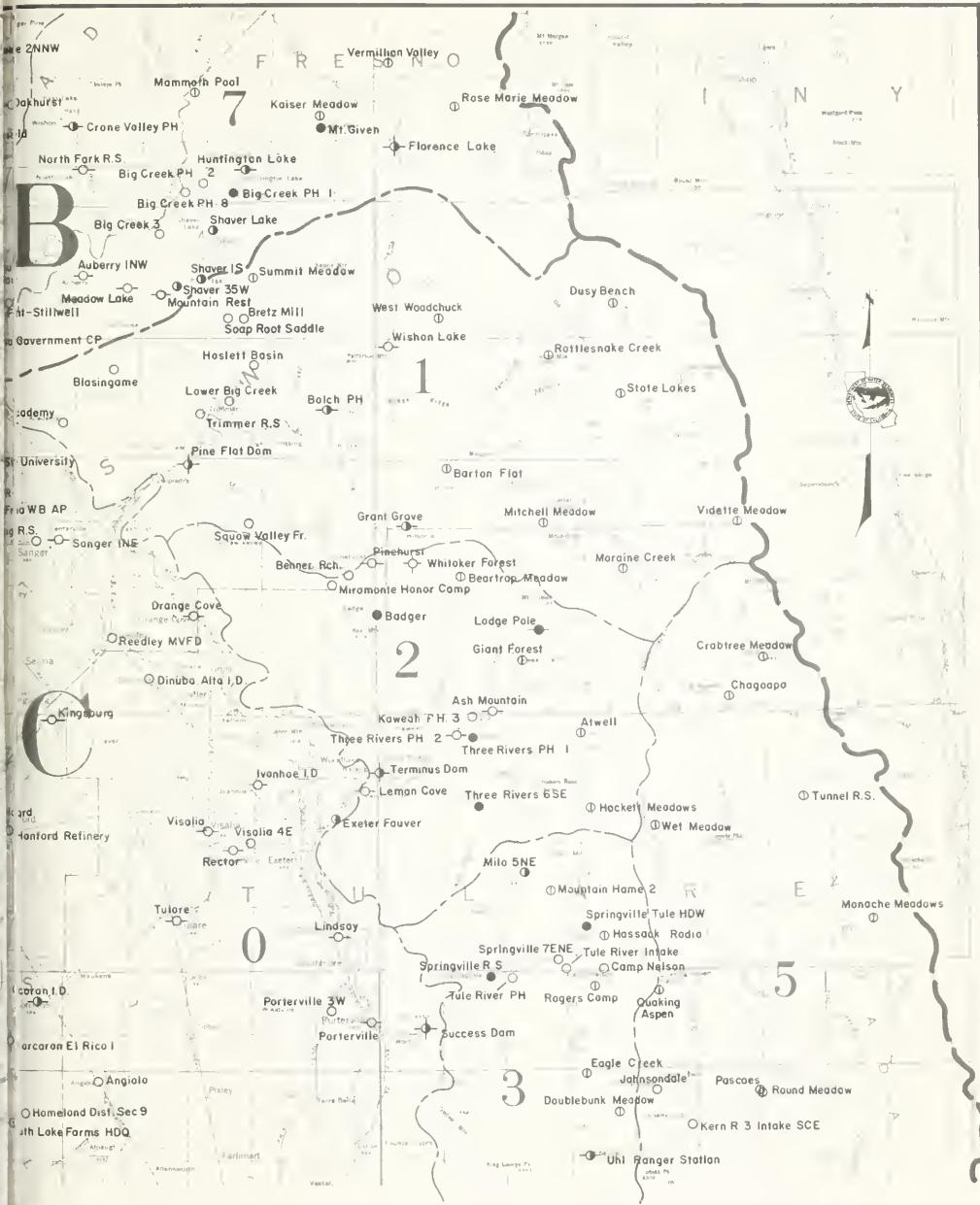
Each station in this appendix has been assigned an identification number. The first two digits denote the drainage basin as shown below. The remaining digits denote the alphabetical sequence of the station.

HYDROGRAPHIC AREA B		HYDROGRAPHIC AREA C	
SAN JOAQUIN RIVER BASIN		TULARE LAKE DRAINAGE BASIN	
B0	- San Joaquin Valley Floor	C0	- Tulare Lake Valley Floor
B3	- Stanislaus River	C1	- Kings River
B4	- Tuolumne River	C2	- Kaweah River
B5	- Merced River	C3	- Tule River
B6	- Fresno-Chowchilla Rivers	C4	- Greenhorn Mountains
B7	- San Joaquin River	C5	- Kern River
B8	- San Joaquin Valley on West Side	C6	- Tehachapi Mountains
		C7	- Tulare Lake Basin on West Side









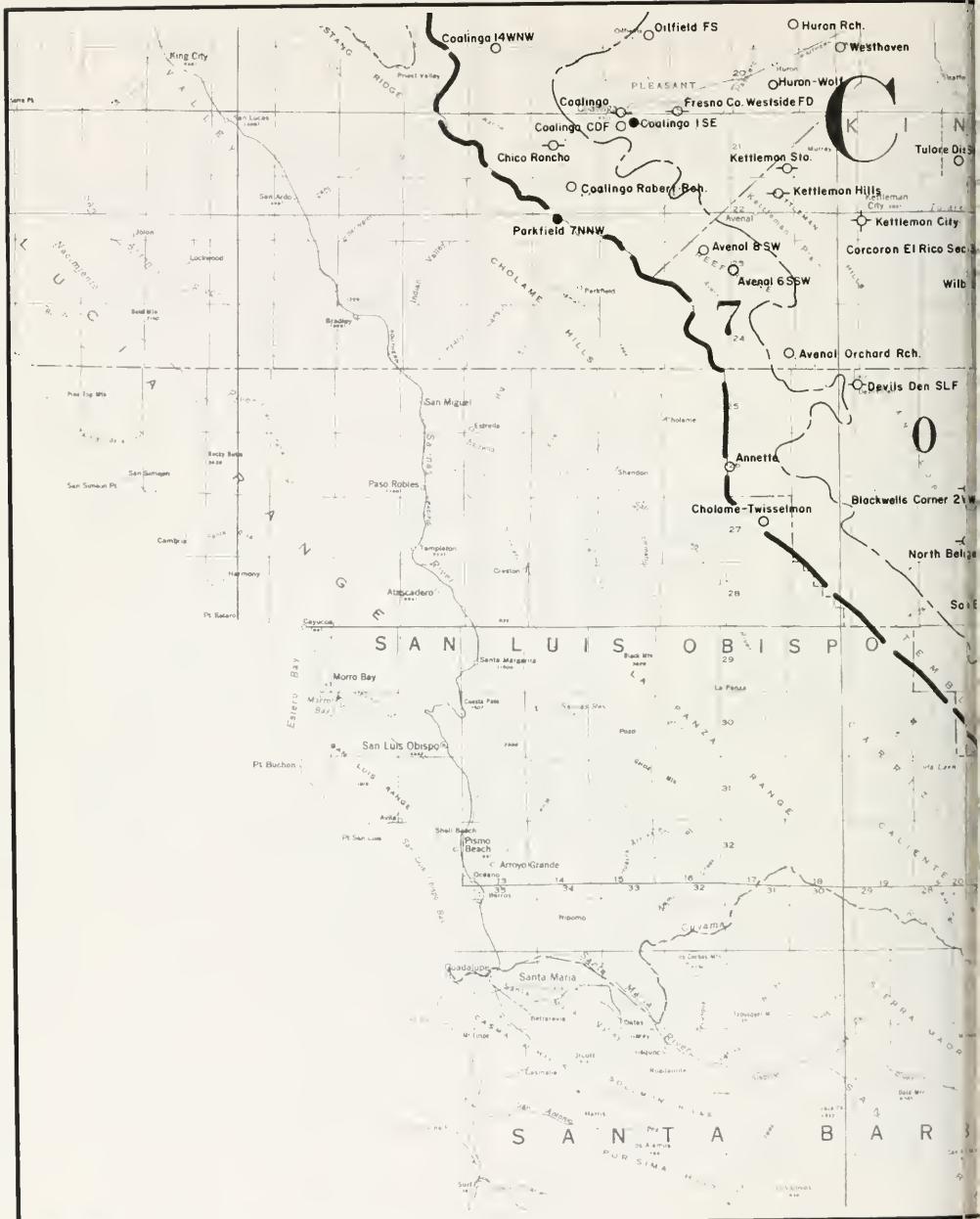






TABLE A-1
INDEX OF CLIMATOLOGICAL STATIONS

An explanation of the column headings and code symbols used in connection with this table follows:

40-Acre Tract. This denotes the location of the station within the section in which it is located. The letter code is derived from the following diagram:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Base and Meridian. The code for this column is as follows:

- M - Mount Diablo Base and Meridian
- S - San Bernardino Base and Meridian

Cooperators' Numbers. These numbers are assigned from the following list:

- 000 - Private Cooperators
- 001 - 399 Private Agencies
 - 001 Kern County Land Company
 - 002 Boswell Company
 - 003 Pacific Gas and Electric Company
 - 004 Southern California Edison Company
 - 005 California Electric Power Company
 - 010 Amateur Radio Weather Network KTRB
 - 011 Southern Pacific Transportation Company
 - 012 Miller and Lux, Inc.
 - 013 Central California Irrigation District
- 400 - 799 Counties and municipalities
 - 401 Hetch Hetchy Water Supply
 - 404 Oakdale Irrigation District
 - 405 City of Los Angeles, Department of Water & Power
 - 420 Stanislaus County
- 800 - 899 State
 - 801 Pomology Department, University of California, Davis
 - 804 Department of Parks and Recreation
 - 805 Department of Fish and Game
 - 806 Department of Water Resources
 - 808 Division of Forestry
 - 809 Department of Transportation

TABLE A-I (Cont.)

814	University of California, Davis, Westside Field Station
815	University of California, School of Forestry
900 - 999	Federal
900	National Weather Service
902	U. S. Air Force, Air Weather Service
903	U. S. Army Corps of Engineers
904	U. S. Bureau of Reclamation
905	U. S. Forest Service
906	U. S. Department of Agriculture, Agricultural Research Service
907	National Weather Service (State Climatologist)
916	U. S. Geological Survey

Cooperators' (Coop) Index Numbers. These are the numbers assigned to the stations by the agencies responsible for handling the station records. With few exceptions, the alpha order numbers assigned to the National Weather Service stations are the same as those used by the National Weather Service. The National Weather Service station number is shown in this column only when it differs from the alpha order number.

Record Began. This is shown to year only.

Record Ended. If record continues this column is left blank.

Years Missing. This denotes missing record to the nearest full year.

County Code. Numbers used to designate specific counties are listed below:

Alpine	02
Calaveras	05
Fresno	10
Inyo	14
Kern	15
Kings	16
Madera	20
Mariposa	22
Merced	24
San Benito	35
San Joaquin	39
San Luis Obispo	40
Stanislaus	50
Tulare	54
Tuolumne	55
Ventura	56

TABLE A-1 (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS
SAN JOAQUIN VALLEY

Station		Elevation (in feet)	Section	Township	Range	40-Acre Tract Date & Revision	Latitude o I II	Longitude o I II	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
Number	Name													
C1 0009	ACADEMY	545	SEC 14	T12S R22E	P M 36 52 58 119 32 25	000					1958	1970	10	
B6 0049	AHHAWNEE 2 NW	2680	SEC 24	T06S R20E	M 37 23 22 119 44 07	907					1959		20	
CO 0204	ANGIOLA	205	SEC 27	T22S R23E	D M 35 59 25 119 28 42	900					1899		54	
B3 0209	ANGELS CAMP	1535	SEC 34	T03N R13E	E M 38 04 20 120 32 18	003					1908		05	
C7 0215	ANNETTE	2140	SEC 19	T26S R17E	R M 35 38 48 120 10 12	000					1952	1974	15	
CO 0332	ARVIN	445	SEC 23	T31S R29E	M 35 12 00 118 49 00	000					1936		15	
C2 0343	ASH MOUNTAIN	1708	SEC 34	T16S R16E	L M 36 29 30 118 49 35	900					1925		54	
BO 0373-80	ATWATER CRAIG	150	SEC 02	T07S R12E	M 37 21 120 37	000					1961	1969	24	
C2 0374	ATWELL	6400	SEC 12	T17S R30E	M 36 28 00 118 40 00	900					1948		54	
B7 0379	AUBERRY 1 NW	2010	SEC 06	T10S R23E	A M 37 05 40 119 29 50	900					1915		10	
CO 0399	AVENAL ORCHARD RCH	712	SEC 25	T24S R17E	P M 35 48 23 120 05 18	000					1919		16	
CT 0399-01	AVENAL 8 SW	1424	SEC 03	T23S R16E	G M 35 57 33 120 13 25	000					1957		16	
C7 0399-02	AVENAL 6 SSW	1565	SEC 18	T23S R17E	K M 35 55 30 120 10 05	000					1953		16	
C2 0422	BADGER	3030	SEC 11	T15S R27E	P M 36 37 53 119 00 46	900					1940		54	
CO 0440	BAKERSFIELD 1 W	400	SEC 24	T29S R27E	H M 35 22 41 119 02 17	900					1913	1969	15	
CO 0442	BAKERSFIELD WB AP	494	SEC 02	T29S R27E	Q M 35 25 38 119 02 34	900					1933		15	
C1 0449	BALCH POWERHOUSE	1720	SEC 12	T12S R26E	B M 36 54 33 119 05 15	900					1921		10	
C1 0534	BARTON FLAT	3760	SEC 01	T12S R28E	M 36 49 118 53	900					1961	1973	10	
B3 0569-60	BEAR VALLEY ALPINE	7100	SEC 18	T07N R18E	E M 38 27 45 120 20 30	000					1967		02	
BS 0570-80	BEAR VALLEY	2600	SEC 20	T04S R17E	M 37 38 120 07	903					1960		22	
B3 0573	BEARDSLEY DAM	3164	SEC 14	T04N R17E	M 38 12 12 120 04 30	404					1959		55	
C2 0596	BEARTRAP MEADOW	6800	SEC 29	T14S R29E	M 36 41 00 118 52 00	900					1959		54	
B4 0617	BEEHIVE MEADOW	6500	SEC 28	T02N R20E	M 38 00 00 119 47 00	900					1947	1971	55	
CO 0631	BELLEVUE	369	SEC 07	T30S R27E	B M 35 20 11 119 05 27	001					1961	1969	15	
C1 0676	BENNER RANCH	3525	SEC 27	T14S R27E	C M 36 41 05 119 01 50	000					1967	1973	10	
B7 0755	BIG CREEK PH 1	4930	SEC 28	T08S R25E	J M 37 12 15 119 14 20	900					1915		10	
B7 0755-01	BIG CREEK PH 2	3000	SEC 25	T08S R24E	N M 37 11 59 119 18 04	004					1913		10	
B7 0755-02	BIG CREEK PH 3	1400	SEC 17	T09S R24E	E M 37 08 08 119 23 00	004					1922		10	
B7 0755-05	BIG CREEK PH 8	2260	SEC 27	T08S R24E	G M 37 12 00 119 20 00	004					1921		10	
CO 0875	BLACKWELLS CORNER 2 NW	710	SEC 35	T26S R19E	L M 35 37 15 119 53 40	900					1944		13	15
CI 0880-80	BLASINGAME	1050	SEC 22	T11S R23E	M 36 57 37 119 26 45	808					1961		10	
CI 1069-11	BRETZ MILL	3250	SEC 27	T10S R25E	D M 37 02 18 119 14 24	905					1960	1967	10	
CO 1174	BUENA VISTA RCH	310	SEC 04	T03S R25E	R M 35 21 00 119 19 00	001					1944	1969	15	
CO 1175	BUENA VISTA RCH M&L	290	SEC 28	T31S R26E	N M 35 11 42 119 11 43	002					1955		15	
CO 1175-80	BUENA VISTA RCH M&L 2	290	SEC 08	T31S R25E	R M 35 14 25 119 18 23	002					1962		15	
CO 1244	BUTTONWILLOW	270	SEC 24	T29S R23E	K M 35 24 00 119 28 00	900					1940		15	
B3 1280	CALEVERAS RANGER STA	3343	SEC 18	T04N R15E	L M 38 11 50 120 21 55	900					1944		05	
C3 1425	CAMP NELSON	4560	SEC 32	T20S R31E	R M 36 08 17 118 37 36	000					1959	1970	54	
CO 1490	CANTUAR RANCH	295	SEC 06	T17S R15E	N M 36 28 35 120 23 20	000					1955		10	
CO 1557	CARTHURS 4 E	265	SEC 14	T16S R20E	B M 36 32 48 119 45 30	000					1960	1971	10	
BO 1580	CASTLE A F B	170	SEC 32	T06S R13E	L M 37 22 03 120 34 20	902					1951		24	
BS 1588	CATHVEYS VAL BULLRUN R	1425	SEC 34	T06S R17E	H M 37 23 56 120 03 08	900					1940		22	
BS 1588-03	CATHVEYS VALLEY 3 NW	1250	SEC 28	T05S R17E	B M 37 28 33 120 06 33	000					1957		22	
B6 1591	CATHVEYS VAL STONEHOUSE	1210	SEC 14	T06S R17E	M M 37 24 30 120 05 00	000					1951	1970	22	
CS 1647	CHAGOOPA	10390		T16S R33E	M 36 30 118 27	901					1964		54	
B4 1697	CHERRY VALLEY DAM	4765	SEC 05	T01N R19E	L M 37 58 00 119 55 00	900					1955		55	
C7 1716-20	CHICO RANCHO	1350	SEC 20	T21S R14E	M M 36 05 13 120 29 22	000					1969		10	
B7 1737	CHIQUITO CREEK	7290	SEC 07	T05S R24E	N M 37 30 20 119 23 21	900					1961		20	
C7 1743-02	CHOLAME TWISSELMAN	1675	SEC 15	T27S R17E	R M 35 35 00 120 07 00	900					1951		40	
C6 1754	CHUCHAPATE R S	5260	SEC 04	T08N R20W	S M 34 48 00 119 01 00	900					1941		56	
CO 1770-80	CITRUS	660	SEC 13	T11N R20W	M S 35 02 18 118 58 28	001					1963	1969	15	
B7 1844	CLOVER MEADOWS	7002	SEC 06	T05S R25E	M 37 32 119 17	900					1946		20	
CO 1864	COALINGA	671	SEC 32	T20S R15E	P M 36 09 00 120 21 00	900					1942		10	
CT 1864-02	COALINGA ROBERTS RCH	1350	SEC 03	T22S R14E	R M 36 02 18 120 26 40	000					1953		10	
CO 1867	COALINGA 1 SE	663	SEC 04	T21S R15E	J M 36 07 39 120 20 38	900					1911		10	
C7 1869	COALINGA 14 NW	1640	SEC 33	T19S R13E	M 36 14 00 120 34 00	900					1949		10	
CO 1870-80	COALINGA CDF	690	SEC 05	T21S R15E	Q M 36 08 03 120 22 00	808					1961		10	
B6 1878	COARSEGOLD	2363	SEC 05	T08S R21E	M 37 16 00 119 42 00	907					1952		20	
CO 1885	COIT RANCH HDQ	278	SEC 20	T14S R14E	D M 36 42 20 120 28 25	000					1954		10	
B3 1944	COLUMBIA	2150	SEC 11	T02N R14E	N M 38 02 22 120 24 37	000					1969		55	
B3 2003	COPPERPOLIS	1000	SEC 34	T02N R12E	K M 37 59 00 120 38 00	903					1954		03	05
CO 2012	CORCORAN IRRIG DIST	200	SEC 15	T21S R22E	P M 36 05 53 119 34 51	900					1912		16	
CO 2013	CORCORAN EL RICO 1	185	SEC 01	T22S R21E	E M 36 02 36 119 38 42	002					1958		16	
CO 2013-05	CORCORAN EL RICO 33	190	SEC 33	T22S R21E	Q M 35 57 49 119 42 14	002					1951	1969	16	
B5 2072	COULTERVILLE FFS	1870	SEC 33	T02S R14E	A M 37 47 25 120 12 28	000					1959		22	
CS 2114	CRABTREE MEADOW	10700	SEC 01	T16S R33E	M M 36 34 00 118 21 00	000					1948		54	
B7 2122	CRANE VALLEY PH	3440	SEC 25	T07S R22E	M M 37 17 26 119 31 35	003					1903		20	
C6 2222-80	CUMMING'S VALLEY 2	3825	SEC 30	T32S R32E	G M 35 07 118 35 806						1961	1973	15	
B6 2288	DAULTON	410	SEC 26	T09S R18E	E M 37 07 18 119 59 00	000					1946		20	
C3 2335-10	DEER CREEK RCH	950	SEC 05	T23S R29E	R M 35 57 15 119 51 28	000					1968	1969	54	

TABLE A-1 (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS
SAN JOAQUIN VALLEY

Station		Elevation (In Feet)	Section	Township	Range	40-Acre Tract Base & Meridian	Latitude 0 I II	Longitude 0 I II	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
Number	Name													
CO 2346	DELANO	323	SEC 11	T 25S	R 25E	A M 35 46 23	119 14	37 900		1876		15		
CO 2346-01	DELANO GOV'T CAMP	394	SEC 28	T 25S	R 26E	E M 35 48 35	119 11	00 904		1952		15		
BB 2369	DEL PUERTO ROAD CAMP	1125	SEC 12	T 06S	R 05E	Q M 37 25 24	121 22	42 900		1958		50		
BO 2375	DELTA RANCH	90	SEC 26	T 09S	R 11E	M M 37 07 00	120 44	00 013		1949		01	24	
BO 2389-05	DENAIR 3 NNE	137	SEC 20	T 04S	R 11E	M M 37 34	120 47	00 900		1964		50		
BO 2389-20	DENAIR BARFIELD	165	SEC 20	T 05S	R 12E	E M 37 29 18	120 40	47 000		1965		24		
CO 2408	DEVILS DEN SLF	500	SEC 07	T 25S	R 19E	M M 35 45 55	119 58	22 000		1959		15		
CO 2436	DIGIORGIO	483	SEC 10	T 31S	R 29E	B M 35 15 08	118 51	50 000		1937		15		
CO 2440-01	DINUVA ALTA I D	334	SEC 17	T 16S	R 24E	D M 36 32 32	119 23	30 000		1944		54		
C7 2464	DOMENGINE RCH	1000	SEC 29	T 19S	R 15E	A M 36 20 24	120 21	30 000		1959	1972	10		
C7 2464-01	DOMENGINE SPRING	1700	SEC 25	T 18S	R 14E	K M 36 19 53	120 24	04 000		1958	1970	10		
B4 2473	DON PEDRO RESERVOIR	700	SEC 35	T 02S	R 14E	E M 37 43 00	120 24	18 904		1940		55		
C3 2492	DOUBLEBUNK MEADOW	6200	SEC 11	T 22S	R 31E	M M 35 57 00	118 36	00 900		1955	1970	54		
B5 2539	DUDLEY'S	3000	SEC 21	T 02S	R 17E	D M 37 45 14	120 06	30 900		1909		22		
C1 2577	DUSY BENCH	9470		T 10S	R 31E	M M 37 06	118 35	900		1964		10		
C3 2591	EAGLE CREEK	6650		T 22S	R 31E	M M 35 59	118 39	903		1964		54		
B4 2609	EARLY INTAKE PH	2356	SEC 11	T 01S	R 18E	C M 37 52 30	119 57	25 401		1925		55		
CO 2752-80	EIGHTH STAND RCH	338	SEC 36	T 31S	R 27E	M M 35 06 05	119 01	45 001		1963	1969	15		
BO 2820	EL SOLYO RCH	50	SEC 06	T 04S	R 07E	B M 37 37 24	121 14	09 000		1953	1972	50		
BO 2860	ESCALON SWANSON	125	SEC 03	T 02S	R 09E	L M 37 47 20	121 58	15 000		1944		39		
BS 2920	EXCHEQUER RESERVOIR	484	SEC 13	T 04S	R 15E	L M 37 35 06	120 16	11 900		1935		22		
CO 2922	EXETER FAUVER RCH	439	SEC 20	T 18S	R 27E	D M 36 21 28	119 04	45 900		1938		54		
BO 2968	FANCHER RCH CAMP 3	225	SEC 16	T 07S	R 15E	N M 37 19 04	120 20	04 000		1959		24		
C7 3005	FELLOWS	1340	SEC 06	T 32S	R 23E	C M 35 10 44	119 32	39 000		1956		15		
BO 3063	FIREFIREBAUGH 9 W	185	SEC 26	T 12S	R 12E	R M 36 51 04	120 37	03 000		1934	1969	10		
CO 3083	FIVE POINTS 5 SSW	276	SEC 17	T 18S	R 17E	M M 36 21 48	120 09	22 900		1942		10		
CO 3084	FIVE POINTS DIENER	263	SEC 10	T 18S	R 17E	M M 36 22 20	120 06	12 000		1933		10		
B7 3093	FLORENCE LAKE	7345	SEC 36	T 07S	R 27E	N M 37 16 27	118 58	27 900		1940		10		
CO 3207	FOUNTAIN SPRINGS F S	800	SEC 26	T 23S	R 28E	Q M 35 53 31	118 55	58 808		1965		54		
CO 3257	FRESNO WB AP	331	SEC 30	T 13S	R 21E	J M 36 46 10	119 02	900		1899		10		
CO 3258-80	FRESNO CO WESTSIDE FD	600	SEC 31	T 20S	R 16E	Q M 36 08 27	120 16	22 806		1963		10		
B7 3261	FRIANT GOVERNMENT CP	410	SEC 07	T 11S	R 12E	A M 36 59 00	119 43	00 900		1896		10		
B7 3261-05	FRIANT STILLWELL	1009	SEC 23	T 10S	R 21E	B M 37 03 07	119 38	48 000		1965		20		
C2 3397	GIANT FOREST	6412	SEC 06	T 16S	R 30E	E M 36 34 05	118 46	01 900		1921		54		
CO 3428-01	GIN YARD	295	SEC 12	T 32S	R 25E	R M 35 09 12	119 14	10 002		1960		15		
C4 3463	GLENNVILLE	3140	SEC 25	T 25S	R 30E	F M 35 43 28	118 42	07 900		1951		15		
C4 3465	GLENNVILLE FULTON R S	3500	SEC 29	T 25S	R 31E	H M 35 44 00	118 40	00 900		1940		15		
B4 3529	GRACE MEADOW	8900	SEC 31	T 04N	R 22E	M M 38 09 09	119 36	00 900		1947	1970	55		
C1 3551	GRANT GROVE	6580	SEC 32	T 13S	R 28E	N M 36 44 29	118 57	50 900		1924		54		
B5 3586-05	GREELEY HILL 1 N	3060	SEC 17	T 02S	R 17E	F M 37 45 55	120 07	04 000		1965		22		
B4 3669	GROVELAND 2	2825	SEC 21	T 01S	R 16E	E M 37 50 00	120 14	00 900		1940		55		
B4 3672	GROVELAND R S	3135	SEC 27	T 01S	R 17E	L M 37 49 00	120 06	00 900		1940		55		
BO 3690-02	GUSTINE 5 SW	145	SEC 34	T 02S	R 08E	F M 37 13 26	121 02	37 000		1927		24		
BO 3690-04	GUSTINE SNYDER	150	SEC 35	T 02S	R 08E	B M 37 12 00	121 03	00 000		1930		24		
BO 3694	GUSTINE FOREMOST	98	SEC 08	T 02S	R 08E	B M 37 15 28	120 59	53 000		1928		24		
BO 3698	GUSTINE 7 SSW	156	SEC 01	T 09S	R 08E	R M 37 10 25	121 01	54 000		1958		24		
CO 3747	HANFORD	242	SEC 26	T 18S	R 21E	P M 36 19 43	119 39	55 900		1899	1970	16		
CO 3749	HANFORD REFINERY	245	SEC 36	T 18S	R 21E	P Q M 36 18 59	119 39	10 000		1964		16		
C1 3811-11	HASLETTE BASIN	2400	SEC 14	T 11S	R 25E	K M 36 58 18	119 12	54 905		1960		10		
B4 3939	HETCH HETCHY	3870	SEC 16	T 01N	R 20E	G M 37 56 42	119 46	54 900		1910		55		
B6 3948	HIDDEN VALLEY	1750	SEC 01	T 06S	R 16E	J M 37 26 00	119 56	24 000		1949		22		
B3 3952	HIGHLAND LAKES	8700	SEC 32	T 03N	R 20E	O M 38 29 48	119 47	48 900		1960		02		
BO 3981	HILMAR	93	SEC 22	T 02S	R 08E	A M 37 24 10	120 50	59 000		1948		24		
C2 4012	HOCKETT MEADOWS	8500	SEC 07	T 18S	R 31E	M M 36 22 00	118 39	00 900		1959		54		
B4 4015	HODGDON MEADOW	4640	SEC 03	T 02S	R 19E	M M 37 48	119 52	907		1967		55		
CO 4061-01	HOMELAND DIST SEC 9	190	SEC 09	T 23S	R 22E	A M 35 56 53	119 35	30 002		1952	1969	16		
B5 4102-01	HORNITOS ERICKSON RCH	1150	SEC 18	T 05S	R 17E	Q M 37 29 40	120 08	55 000		1955		22		
B5 4103	HORNITOS GILES RCH	1050	SEC 29	T 05S	R 16E	H M 37 28 10	120 14	00 000		1939		22		
B5 4104-80	HORNITOS USCE	850	SEC 17	T 05S	R 16E	G M 37 30 10	120 14	08 901		1960		22		
C3 4120	HOSSACK (RADIO)	7100	SEC 16	T 20S	R 31E	M M 36 11 00	118 37	00 900		1959		54		
B4 4148	HUCKLEBERRY LAKE	7800	SEC 23	T 03N	R 20E	M M 38 06 00	119 45	00 900		1948	1971	55		
B3 4170	HUNTERS DAM	3220	SEC 18	T 04N	R 15E	K M 38 12 00	120 21	36 900		1950		05		
B7 4176	HUNTINGTON LAKE	7020	SEC 15	T 02S	R 25E	R M 37 13 45	119 13	10 900		1915		10		
CO 4188	HURON RANCH	335	SEC 22	T 19S	R 17E	M M 36 15 41	120 06	05 000		1951		10		
BB 4204	IDRIA	2650	SEC 29	T 17S	R 12E	J M 36 24 58	120 40	17 900		1918		35		
B5 4246	INDIAN GULCH	1000	SEC 03	T 06S	R 16E	J M 37 26 48	120 11	46 000		1952	1970	22		
C5 4303	ISABELLA DAM	2660	SEC 19	T 26S	R 33E	P M 35 38 46	118 28	45 903		1949		15		
CO 4312	IVANHOE I D	370	SEC 36	T 16S	R 25E	R M 36 24 15	119 12	21 000		1954		54		
B5 4369	JERSEYDALE G S	3605	SEC 35	T 04S	R 19E	M M 37 32 36	119 50	905		1958		22		
B5 4389	JOHNSONDALE	4680	SEC 32	T 22S	R 32E	K M 35 58 13	118 32	27 900		1954		54		

TABLE A-I (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS
SAN JOAQUIN VALLEY

Station		Elevation (in Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude	Longitude	Cooperator Number	Operator's Index Number	Record Begin	Record Ended	Years Missing	County Code
Number	Name														
B7 4442	KAI SER MEADOWS	9110	SEC 26	T07S R26E	M 37 18 00	119 06 00	900			1946	10				
C2 4452	KAWEAH PH 3	1370	SEC 33	T16S R29E Q	M 36 29 12	118 50 06	004			1913	1974				
C6 4463	KEENE	2575	SEC 20	T31S R32E C	M 35 13	28 118 33	55 000			1948	15				
C5 4513	KERN CANYON	700	SEC 06	T29S R30E B	M 35 26	27 118 47	45 003			1916	15				
C5 4519	KERN R 3 INTAKE SCE	3642	SEC 12	T23S R32E F M	M 35 56 43	118 28 33	004			1921	54				
C5 4520	KERN RIVER PH NO 1	970	SEC 29	T28S R30E N M 35 27	37 118 46 48	900				1904	15				
C5 4523	KERN RIVER PH NO 3	2703	SEC 09	T25S R33E A M 35 46	35 118 26 08	900				1946	15				
CO 4534	KETTLEMAN CITY	310	SEC 19	T22S R19E C M 35 59	45 119 57 55	900				1930	03	16			
CO 4535	KETTLEMAN HILLS	1255	SEC 11	T22S R17E F M 36 01	50 120 06 15	000				1931	16				
CO 4536	KETTLEMAN STATION	508	SEC 25	T21S R17E L M 36 04	28 120 05 08	900				1933	16				
BO 4590	KNIGHTS FERRY 2 SE	315	SEC 17	T01S R12E	M 37 47 54	120 38 42	900			1905	50				
B3 4664	LAKE ALPINE	7500	SEC 08	T07N R18E A	M 38 28 42	120 00 48	900			1948	02				
BD 4679	LAKE ELEANOR	4662	SEC 03	T01N R19E F	M 37 00 119	53 00	900			1899	1972	55			
CG 4863	LEBEC	3585	SEC 26	T09N R19W S M 34 49	58 118 51 51	900				1940	15				
BO 4884	LE GRAND	255	SEC 17	T08S R16E N M 37 13	28 120 14 50	900				1899	24				
BO 4984-05	LE GRAND 6 N	280	SEC 19	T07S R16E H M 37 18 39	120 15 05	000				1946	24				
C2 4990	LEMON COVE	513	SEC 02	T18S R27E N M 36 23	00 119 01 31	900				1899	54				
CO 4957	LINDSAY	395	SEC 17	T20S R27E F M 36 11 24	119 04 20	900				1913	54				
BB 4979	LITTLE PANOCHE DET RES	677	SEC 20	T13S R11E M 36 47	120 48 00	000				1968	1975	10			
BO 4999-02	LIVINGSTON CITY HALL	130	SEC 25	T06S R11E E M 37 23	10 120 43 15	000				1948	07	24			
BO 4999-03	LIVINGSTON 5 W	112	SEC 32	T06S R11E D M 37 22 29	120 47 40	000				1952	24				
C2 5026	LOGGEPOLE	6735	SEC 21	T15S R30E M 36 36	56 118 14	900				1968	54				
C6 5098	LORAINA	2720	SEC 21	T30S R33E K M 35 18 05	118 25 54	900				1941	15				
BO 5116	LOS BANOS 5 S	175	SEC 11	T11S R10E P M 36 59	02 120 50 45	013				1948	24				
BO 5117	LOS BANOS FIELD STA	160	SEC 32	T10S R10E Q M 37 00	54 120 53 55	904				1956	24				
BO 5118	LOS BANOS	125	SEC 23	T10S R10E L M 37 03 00	120 51 00	900				1873	24				
BB 5119	LOS BANOS ARBURUA	860	SEC 24	T12S R09E C M 36 52	52 120 56 25	900				1932	24				
BB 5120	LOS BANOS DET RES	407	SEC 12	T11S R09E M 37 01	120 56	900				1968	24				
CO 5151	LOSS HILLS	285	SEC 35	T26S R21E N M 35 37	00 119 41 17	900				1912	15				
CI 5155-51	LOWER BIG CREEK	1078	SEC 04	T12S R25E J M 36 54	48 119 14 42	905				1960	1967	10			
B4 5160	LOWER KIBBEY RIDGE	6500	SEC 22	T02N R19E	M 38 01 00	119 53 00	900			1948	1971	55			
BO 5233-03	MADERA I D YARD	270	SEC 32	T11S R18E N M 36 55	15 120 01 12	904				1952	20				
B2 5236	MADERA	200	SEC 13	T11S R18E P M 36 58	120 03	900				1950	20				
CG 5257	MAGUNDEN	440	SEC 36	T29S R28E G M 35 21	42 118 55 18	004				1927	15				
B7 5288	MAMMOTH POOL	3400	SEC 11	T07S R24E D M 37 20	31 119 19 45	905				1947	20				
BO 5303	MANTECA	44	SEC 04	T02S R07E H M 37 47	121 12	900				1964	39				
CT 5338	MARICOPA	680	SEC 31	T12N R23W N S 35 04	48 119 22 58	900				1911	15				
C7 5338-01	MARICOPA F S	885	SEC 12	T11N R24W E S 35 04	119 24	000				1959	15				
B5 5346	MARIPOSA	2011	SEC 23	T05S R18E B M 37 29	10 119 58 00	900				1909	22				
B5 5346-01	MARIPOSA REYNOLDS	2000	SEC 23	T05S R18E B M 37 29	20 119 57 55	000				1958	22				
BB 5346-04	MARIPOSA 8 ESE	2780	SEC 06	T06S R20E M 37 26 30	119 49 37	000				1952	22				
B5 5352	MARIPOSA RS	2100	SEC 15	T05S R18E F M 37 30 04	119 59 05	808				1943	22				
CB 5372-01	MARTINEZ SPRING	1875	SEC 26	T18S R14E B M 36 20	24 120 24 54	000				1959	1970	10			
BA 5400	MATHER	4518	SEC 02	T01S R19E G M 37 53	25 119 51 10	900				1930	21	55			
B5 5460	MCDIERMID STA	2990	SEC 33	T02S R17E H M 37 43	18 120 05 48	000				1959	1969	22			
C7 5480-01	MCKITTRICK F S	1051	SEC 21	T30S R22E E M 35 18	20 119 37 20	000				1956	15				
B7 5496	MEADOW LAKE	4485	SEC 11	T10S R23E F M 37 04	38 119 26 00	900				1948	10				
B3 5511	MELONES DAM	900	SEC 11	T01N R13E K M 37 57	10 120 30 53	404				1955	1969	55			
BO 5526	MENDOTA 1 NNW	172	SEC 25	T13S R14E H M 36 46	23 120 23 09	013				1941	10				
CO 5526-04	MENDOTA MURIETTA RCH	261	SEC 04	T15S R14E M M 36 39	05 120 27 20	806				1958	10				
BO 5528	MENDOTA DAM	166	SEC 19	T13S R15E G M 36 47	15 120 22 12	900				1873	10				
BO 5530	MENDOTA V D L FARMS	230	SEC 32	T13S R14E Q M 36 44	58 120 28 00	900				1948	10				
BO 5532	MERCED FIRE STN NO 2	169	SEC 25	T07S R13E M	37 43 120	29 13 900				1872	24				
BO 5534	MERCED FANCHER RCH	212	SEC 29	T07S R15E F M	37 17 47	120 21 09	000			1920	24				
BB 5535	MERCED 2	168	SEC 19	T07S R14E A M	37 18 53 120	28 12 900				1938	24				
C3 5669	MILLO 5 NE	3400	SEC 18	T19S R30E C M 36 16	40 118 46 15	900				1957	54				
C6 5669-05	MIL POTTERO	5800	SEC 24	T09N R22W E S 34 51	02 119 11 18	000				1966	15				
C2 5680	MINERAL KING	7975	SEC 22	T17S R21E M	36 26 00	118 35 00	900			1956	1969	54			
C2 5708	MIRAMONTE HONOR CAMP	3005	SEC 31	T14S R27E D M 36 40	00 119 05 00	900				1958	10				
CI 5723	MITCHELL MEADOW	9700	SEC 33	T13S R30E M	36 45 00	118 43 00	900			1957	05	10			
B4 5725	MOCCASIN	950	SEC 34	T01S R15E B M 37 48	40 120 18 20	401				1935	55				
BO 5738	MODESTO	91	SEC 29	T03S R09E H M 37 38	48 121 00 02	900				1926	50				
BO 5740	MODESTO KTRB	93	SEC 16	T03S R09E J M 37 40	12 120 58 42	010				1959	1974	50			
BO 5741	MODESTO 2	92	SEC 29	T03S R09E M	37 38 36 121	00 29	900			1942	50				
CS 5777	MONACHE MEADOWS	8000	SEC 10	T20S R35E M	36 13 00	118 10 00	900			1940	1971	54			
CO 5822-80	MOODY RCH	405	SEC 34	T32S R28E M	35 06 15	118 58 00	001			1963	1969	15			
C1 5832	MORAINA CREEK	8840		T14S R31E	M 36 43	118 34	903			1964	54				
C3 5887	MOUNTAIN HOME 2	5360	SEC 27	T19S R30E J M 36 14	30 118 42 54	901				1963	54				
B7 5927	MT GIVENS	9500	SEC 26	T07S R26E E M 37 17	119 06 00	004				1963	1969	10			
BO 6168	NEWMAN 2 NW	108	SEC 12	T07S R08E M	37 20 33	122 50 00	900			1889	50				

TABLE A-1 (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS
SAN JOAQUIN VALLEY

Station		Elevation (in feet)	Section	Township	Range	40-Acre Tract Slope & Meridian	Latitude	Longitude	Cooperator Number	Cooperator's Index Number	Record Begun	Record Ended	Years Missing	County Code
Number	Name						o I II	o I II						
C0 6230-50	NORTH BELRIDGE	630	SEC 26	T27S	R20E	F M 35 33 04	119 47	126 00	1953	15				
B7 6252	NORTH FORK R S	2630	SEC 18	T08S	R23E	M M 37 13 57	119 30	15 900	1904	20				
B0 6303	OAKDALE	155	SEC 11	T02S	R10E	N M 37 46 10	120 50	53 000	1880	01	50			
B6 6321-80	OAKHURST	2250	SEC 14	T07S	R21E	L M 37 19 46	119 38	42 000	1961	20				
CO 6393	OILFIELDS F S	950	SEC 26	T19S	R15E	F M 36 14 50	120 18	50 808	1952	10				
C7 6395	OILFIELDS JOAQUIN RDG	3620	SEC 01	T19S	R14E	M M 36 18 00	120 24	00 900	1949	10				
CO 6414	OLD RIVER 3 W	334	SEC 35	T30S	R26E	C M 35 16 00	119 16	19 806	1965	1973				
C5 6462	ONYX	2700	SEC 04	T26S	R35E	K M 35 41 00	118 14	00 903	1938	15				
CO 6476	ORANGE COVE	431	SEC 13	T15S	R24E	K M 36 37 18	119 18	40 900	1931	10				
BO 6490	ORESTIMBA	110	SEC 02	T07S	R08E	D M 37 21 42	121 03	47 013	1896	50				
B5 6552	OSTRANDER LAKE	8600	SEC 00	T03S	R22E	M M 37 38 00	119 33	00 900	1947	22				
BB 6583	PACHECO PASS	850	SEC 10	T10S	R07E	B M 37 04 00	121 11	00 900	1949	24				
BB 6675	PANOCHE	1265	SEC 25	T15S	R10E	F M 36 35 47	120 49	58 900	1922	1975	35			
BB 6676	PANOCHE 2 W	1320	SEC 21	T15S	R10E	M M 36 36 30	120 52	48 407	1957	35				
BO 6679-05	PANOCHE WATER DIST	183	SEC 14	T12S	R11E	H M 36 53 24	120 43	43 000	1949	10				
B4 6688	PARADISE MEADOW	7700	SEC 09	T02N	R21E	M M 38 03 00	119 40	00 900	1948	1971	55			
BO 6746-01	PATTERSON	100	SEC 30	T05S	R08E	M M 37 28 00	121 07	00 000	1912	50				
B6 6754	PATTI LAKE	3868	SEC 19	T10N	R23W	E M 36 54 27	119 22	52 900	1915	15				
C2 6767	PEAR LAKE	9700	SEC 24	T15S	R30E	M M 36 36 00	118 40	00 900	1956	1969	54			
BB 6847	PEIFFER RCH	1615	SEC 19	T12S	R08E	C M 36 52 59	121 08	12 000	1954	02	24			
B3 6893	PINECREST SUMMIT R S	5600	SEC 21	T04N	R18E	M M 38 12 59	119 59	90 905	1964	55				
B3 6893-01	PINECREST STRAWBERRY	5620	SEC 22	T04N	R18E	F M 38 11 25	119 59	12 003	1922	55				
Cl 6896	PINE FLAT DAM	615	SEC 02	T13S	R24E	A M 36 45 55	119 19	25 903	1949	10				
Cl 6902	PINEHURST	4050	SEC 23	T14S	R27E	D M 36 41 54	119 00	54 905	1954	10				
CO 7077	PORTERVILLE	393	SEC 26	T21S	R27E	R M 36 03 58	119 01	14 900	1893	54				
CO 7079	PORTERVILLE 3 W	413	SEC 20	T21S	R27E	R M 36 04 50	119 04	14 000	1958	54				
C5 7093	PORTUGUESE MEADOW	7000	SEC 31	T24S	R32E	M M 35 48 00	118 34	00 900	1953	54				
C4 7096	POSEY 3 E	4920	SEC 28	T24S	R31E	M M 35 48 00	118 38	00 900	1954	02	54			
CO 7098-07	POSO CREEK	670	SEC 28	T27S	R27E	F M 35 33 15	119 04	25 000	1967	1969	15			
CO 7098-11	POSO RCH	370	SEC 03	T27S	R25E	J M 35 36 30	119 15	45 001	1913	1969	15			
BO 7099-11	POSO CANAL CO HDQ	125	SEC 12	T11S	R13E	P M 36 58 57	120 30	04 013	1955	10				
C5 7179	QUAKING ASPEN	7200	SEC 08	T21S	R32E	J M 36 07 00	118 32	00 900	1955	1970	54			
C1 7259	RATTLESNAKE CREEK	9900	SEC 08	T11S	R30E	M M 36 59 00	118 43	00 900	1961	10				
B6 7270-01	RAYMOND 3 SSW	635	SEC 06	T09S	R19E	J M 37 10 32	119 55	55 000	1940	1970	20			
B6 7272-01	RAYMOND 10 N	1640	SEC 32	T06S	R19E	A M 37 22 24	119 54	24 000	1957	22				
B6 7276	RAYMOND 12 NNE	1600	SEC 25	T06S	R19E	R M 37 22 37	119 49	58 000	1954	22				
CO 7288	RECTOR	344	SEC 03	T19S	R25E	J M 36 18 15	119 14	34 004	1888	54				
CO 7354-80	REEDLEY MVFD	345	SEC 27	T11S	R23E	M M 36 37 27	119	27 808	1962	10				
BO 7447-80	RIPON	65	SEC 20	T02S	R08E	M M 37 44 33	121	07 21 000	1963	39				
CO 7460	RIVERDALE	220	SEC 24	T17S	R19E	P M 36 25 58	119	15 36 000	1917	10				
B6 7528	ROCKY VILLAGE	820	SEC 19	T06S	R17E	K M 37 20 45	120 08	42 000	1957	1972	22			
C3 7529	ROGERS CAMP	6240	SEC 09	T21S	R31E	M M 36 04 24	118 38	12 901	1964	54				
CO 7555	ROSEDALE	380	SEC 01	T29S	R26E	R M 35 25 40	119	07 42 001	1914	1969	15			
B7 7560	ROSE MARIE MEADOW	10000	SEC 14	T07S	R28E	M M 37 19 00	118 52	00 900	1953	10				
CS 7579	ROUND MEADOW	9000	SEC 36	T22S	R33E	M M 35 58 00	118	21 00 900	1947	1971	54			
B4 7623	SACHES SPRINGS	7900	SEC 25	T03N	R19E	M M 38 06 00	119 51	00 900	1948	1971	55			
CO 7753	SAN ENIGDIO RCH	1450	SEC 36	T11S	R23W	L S 34 59 45	119	10 59 900	1901	1969	15			
CO 7800-02	SANGER 1 NE	375	SEC 11	T14S	R22E	K M 36 43 30	119	32 36 000	1959	10				
CO 7800-03	SANGER R S	375	SEC 11	T14S	R22E	B M 36 43 48	119	33 18 808	1958	10				
CO 7816	SAN JOAQUIN	174	SEC 23	T15S	R16E	J M 36 36 25	120	11 15 000	1919	10				
B7 7817	SAN JOAQUIN EXP RANGE	1100	SEC 06	T10S	R21E	M E 37 05 40	119	43 38 900	1934	20				
CO 7819-80	SAN JOAQUIN MVFD	174	SEC 23	T15S	R16E	J M 36 36 28	120	11 18 808	1962	1970	10			
B8 7846	SAN LUIS DAM	277	SEC 14	T10S	R08E	M M 37 03	121	04 904	1959	24				
BO 7855	SAN LUIS CANAL CO HQ	99	SEC 31	T09S	R12E	P M 37 06 07	120	42 04 013	1944	24				
CO 7987-80	SANTIAGA RANCH	437	SEC 27	T12N	R22W	S M 35 05 35	119	12 35 000	1963	1970	15			
BO 8316	SNELLING	259	SEC 04	T05S	R14E	M M 37 31 24	120	26 18 000	1882	19	24			
BO 8316-05	SNELLING 3 WNW	300	SEC 36	T04S	R13E	J M 37 32 35	120	28 57 000	1949	1974	24			
B5 8318	SNOW FLAT	8700	SEC 19	T01S	R23E	M M 37 50 00	119	30 00 900	1947	01	22			
Cl 8323-01	SOAPROOT SADDLE	3830	SEC 28	T10S	R25E	P M 37 01 30	119	15 06 905	1960	1967	10			
B4 8353	SONORA R S	1745	SEC 36	T02N	R14E	M M 37 59 00	120	23 00 900	1887	55				
CO 8375-50	SOUTH BELRIDGE	575	SEC 28	T28S	R21E	R M 35 27 23	119	42 37 000	1938	15				
BO 8378	SOUTH DOS PALOS	116	SEC 22	T11S	R12E	E M 37 58 45	120	38 48 000	1938	24				
B5 8380	SD ENTRANCE YOSEMITE	5120	SEC 12	T05S	R21E	N M 37 30 26	119	37 55 900	1941	22				
CO 8407-11	SOUTH LAKE FARMS HDQ	190	SEC 13	T23S	R21E	A M 35 56 02	119	38 46 000	1959	16				
B3 8450	SPRING GAP FOREBAY	3000	SEC 27	T04N	R17E	H M 38 10 06	120	26 08 003	1921	55				
C3 8455	SPRINGVILLE 7 ENE	2470	SEC 26	T20S	R30E	D M 36 03 47	118	42 21 900	1953	54				
C3 8460	SPRINGVILLE R S	1050	SEC 02	T21S	R29E	B M 36 08 09	118	48 40 900	1924	54				
C3 8463	SPRINGVILLE TULE HDW	4070	SEC 07	T20S	R31E	Q M 36 11 35	118	39 23 900	1907	54				
C1 8474-80	SQUAW VALLEY FR	1750	SEC 35	T13S	R25E	P M 36 44 58	119	12 21 808	1961	10				
B3 8499	STANISLAUS PH	1130	SEC 06	T03N	R15E	L M 38 08 23	120	22 10 900	1957	55				

TABLE A-1 (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS
SAN JOAQUIN VALLEY

Station		Elevation (in feet)	Section	Township	Range	40-Acre Tract Base & Meridian	Latitude	Longitude	Cooperator Number	Cooperator's Index Number	Record Begin	Record Ended	Years Missing	County, Code
Number	Name													
C1 8510	STATE LAKES	10300	SEC 34	T11S R31E	M 36 56 00	118 35 00	900				1955		10	
C3 8620	SUCCESS DAM	590	SEC 35	T21S R28E	L M 36 03	00	118 55 00	903			1959		54	
C1 8643	SUMMIT MEADOW	6240	SEC 02	T10S R25E	Q M 37 05	12	119 12 36	900			1960		10	
C7 8752	TAFT	1025	SEC 14	T12S R23E	J M 35 08	34	119 27 53	900			1940		15	
C7 8755	TAFT KTKR RADIO	1030	SEC 14	T12S R23E	G M 35 08	50	119 28 18	000			1954		15	
C6 8826	TEHACHAPI	3975	SEC 21	T32S R33E	M M 35 08	00	118 27 00	900			1876		15	
C6 8832	TEHACHAPI AIRPORT	3975	SEC 21	T32S R33E	C M 35 08	05	118 26 31	900			1940		15	
CO 8839	TEJON RANCHO	1425	SEC 24	T11N R18W	H S 35 01	35	118 44 38	900			1895		15	
C5 8857-10	TEN HIGH MINE	5200	SEC 03	T12S R27E	A M 35 36	49	118 37 30	000			1968	1971	15	
C2 8868	TERMINUS DAM	965	SEC 36	T17S R27E	E M 36 24	37	119 00 20	903			1959		54	
C7 8893-80	THIRTY-TWO CORRAL	1700	SEC 32	T18S R15E	P M 36 18	47	120 21 51	000			1959	1970	10	
C2 8912	THREE RIVERS 6 SE	2200	SEC 16	T18S R29E	C M 36 22	00	118 51 00	900			1940		54	
C2 8914	THREE RIVERS PH NO 2	950	SEC 07	T17S R29E	Q M 36 27	40	118 52 40	900			1969	1971	54	
C2 8917	THREE RIVERS PH NO 1	1140	SEC 08	T17S R29E	K M 36 27	58	118 51 40	900			1940		54	
CO 9006	TRANQUILLITY GLOTZ	165	SEC 16	T15S R16E	C M 36 27	57	120 14 13	000			1953		10	
B6 9020-15	TRIANGLE-DESMOND	3150	SEC 19	T05S R20E	A M 37 29	10	119 09 06	000			1965	1974	22	
CI 9024	TRIMMER R S	736	SEC 12	T12S R24E	A M 36 54	05	119 17 16	905			1948		10	
CO 9051	TULARE	293	SEC 01	T20S R24E	N M 36 12	45	119 19 50	004			1919		54	
CO 9051-04	TULARE DIST SEC 27	179	SEC 27	T21S R20E	A M 36 04	41	119 47 33	002			1953	1969	16	
CO 9052	TULEFIELD	300	SEC 18	T32S R28E	B M 35 09	00	119 01 00	900			1948	1970	15	
C3 9059	TULE RIVER INTAKE	2450	SEC 26	T20S R30E	D M 36 09	42	118 42 22	004			1910		54	
C3 9060	TULE RIVER PH	1240	SEC 06	T21S R30E	D M 36 08	07	118 47 15	004			1910		54	
C5 9061	TUNNEL R S	8950	SEC 10	T18S R34E	M 36 22	00	118 17 00	900			1945		54	
B3 9062	TULLOCH DAM	515	SEC 01	T01S R12E	L M 37 52	30	120 36 12	404			1958		05	
B4 9062-90	TUOLUMNE MAINT YARD	2690	SEC 05	T01N R16E	R M 37 57	55	120 13 55	000			1969		55	
B4 9063	TUOLUMNE MEADOWS	8600	SEC 03	T03S R24E	M 37 53	00	119 20 00	900			1947		55	
BO 9073	TURLOCK	115	SEC 22	T05S R10E	D M 37 29	28	120 51 00	900			1893		50	
BO 9073-01	TURLOCK 5 SW	76	SEC 30	T05S R10E	Q M 37 27	52	120 59 30	000			1958		50	
BO 9073-02	TURLOCK 8 WSW	60	SEC 28	T05S R09E	D M 37 28	22	120 59 30	000			1958		50	
C3 9120	UHL R S	3680	SEC 32	T23S R31E	H M 35 53	118 39	900				1965		54	
CO 9145	U S COTTON FIELD STN	367	SEC 33	T27S R25E	J M 35 32	00	119 16 40	906			1922		15	
B7 9301	VERMILLION VALLEY	7520	SEC 26	T06S R27E	M 37 22	00	118 59 00	900			1946		10	
CO 9304	VESTAL	500	SEC 17	T24S R27E	M 35 35	24	119 05 12	004			1920		54	
CI 9328	VIDETTE MEADOW	9500		T13S R33E	M 36 45	118 25	901				1964		10	
CO 9367	VISALIA	354	SEC 29	T18S R25E	M M 36 19	45	119 17 18	900			1903		54	
CO 9369	VISALIA 4 E	357	SEC 36	T18S R25E	D M 36 19	32	119 13 24	000			1959	1970	54	
CS 9417-10	WALKER BASIN	3450	SEC 10	T29S R32E	E M 35 25	17	118 32 35	000			1968		15	
CO 9452	WASCO	333	SEC 12	T27S R24E	J M 35 35	35	119 19 57	800			1899		15	
BO 9482	WAWONA R S	3975	SEC 34	T04S R21E	P M 37 32	19	119 40	800			1941		22	
CS 9512	WELDON 1 WSW	2680	SEC 23	T26S R34E	D M 35 40	00	118 18 00	900			1940		15	
B6 9556-80	WESTFALL R S	4795	SEC 35	T05S R22E	M M 37 26	58	119 38 59	905			1961	1971	20	
CO 9560	WESTHAVEN	285	SEC 34	T19S R18E	R M 36 13	38	119 59 40	900			1925		10	
BO 9565	WESTLEY	85	SEC 33	T04S R07E	B M 37 33	00	121 12 00	000			1928		50	
CI 9600	WEST WOODCHUCK	9100	SEC 28	T10S R28E	M 37 01	48	118 55 06	903			1969		10	
CS 9602	WET MEADOW	8950	SEC 13	T18S R32E	R M 36 20	56	118 34 16	900			1959		54	
C2 9629	WHITAKER FOREST	5360	SEC 16	T14S R28E	K M 36 42	05	118 55 56	815			1966		54	
B6 9640-80	WHITE ROCK PRESTON	984	SEC 07	T07S R18E	K M 37 20	12	120 02	903			1950		22	
CO 9670-80	WILBURN DITCH	210	SEC 18	T23S R21E	D M 35 36	10	119 45 10	000			1962		16	
CI 9749	WISHON LAKE	6560	SEC 01	T11S R27E	M 37 00	40	118 58 20	003			1957		10	
CS 9754	WOFFORD HEIGHTS	2700	SEC 32	T25S R33E	H M 35 43	00	118 27 00	900			1894		15	
C4 9805	WOODY	1630	SEC 03	T26S R29E	C M 35 42	02	118 50 34	808			1956		15	
B5 9895	YOSEMITE NAT PARK	3985	SEC 20	T02S R22E	M 37 45	00	119 35 00	900			1904		22	
<u>ADDITIONAL STATIONS</u>														
BO 5738-35	MODESTO 6 SW	50	SEC 03	T05S R08E	C M 37 32	05	121 04 30				1970		50	
B7 5893	MOUNTAIN REST	4100	SEC 17	T10S R24E	R M 37 03	18	119 22 12	905			1960		10	
CO 5456-20	KINGSBURG	286	SEC 02	T17S R22E	M 36 30	119 33	915				1970		16	
C6 2683-20	EDMONSTON P P	1300	SEC 17	T10N R18W	M S 34 56	42	118 49 30	806			1971	1973	15	
CS 6724-50	PASCOES	9130	SEC 36	T22S R33E	M 35 58	118 21	903				1971		54	
B7 8139-40	SHAVER 1 S	5680	SEC 12	T10S R24E	C M 37 04	55	119 19 05	806			1973		10	
B7 8139-50	SHAVER 3 SW	4900	SEC 19	T10S R24E	R M 37 04	08	119 21 02	806			1973		10	
CO 3257-30	FRESNO DWR	313	SEC 26	T13S R20E	C M 36 44	42	119 46 03	806			1968		10	
CO 5151-30	LOST HILLS DWT	312	SEC 03	T27S R21E	M 35 36	52	119 41 40	806			1973		15	
CO 9724-60	WIND GAP	-814	SEC 26	T11N R20W	S M 35 01	05	118 58 31	806			1974		15	
B7 5893	MOUNTAIN IN REST	4100	SEC 17	T10S R24E	R M 37 03	18	119 22 12	905			1960		10	
B6 6321-85	OKHURST NO 2	2480	SEC 14	T07S R21E	P M 37 19	00	119 38 53	000			1969		10	
BO 8322	SNOW RANCH	240	SEC 12	T01N R10E	Q M 37 57	120 49	000				1934		50	
B5 8858-40	TENAYA LAKE	8150	SEC 21	T01S R23E	B M 37 50	14	119 27 00	800			1972		22	
B4 8931-50	TIOGA PASS	10000	SEC 31	T01N R25E	B M 37 54	39	119 15 30	800			1972		55	
B0 2389	DEAIR	122	SEC 06	T05S R11E	R M 37 31	20	120 47 40	000			1974		50	
B7 8140-01	SHAFER LAKE	5373	SEC 13	T09S R24E	K M 37 08	48	119 18 08	004			1920		10	
B5 5975-25	MT. REBA	7800	SEC 06	T07N R18E	P M 38 29	35	120 02 25	806			1970		02	
CO 3257-15	FRESNO STATE UNIV.	340	SEC 12	T13S R20E	B M 36 49	18	119 44 27	806			1969		10	
CO 4188-20	HURON-WOLF	400	SEC 22	T20S R17E	M 36 10	52	120 07 10	000			1975		10	

TABLE A-2
PRECIPITATION DATA

The definition of terms and abbreviations used in this table follows:

- E Wholly or partially estimated.
- T Trace, an amount too small to measure.
- NR Data not received before publication.
- RB Record begins.
- RE Record ends.
- INC Incomplete data.

Precipitation values are shown to the nearest hundredth (.01) of an inch, except where Fisher & Porter recording rain gages are used; these values are shown to the nearest tenth (.1) of an inch.

TABLE A-2 (Cont.)
PRECIPITATION DATA

PRECIPITATION IN INCHES

STATION NAME	TOTAL JULY 1 TO JUNE 30	1974						1975						TOTAL OCT 1 TO SEPT 30			
		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE				
SAN JOAQUIN RIVER BASIN																	
SAN JOAQUIN VAL FL 80																	
CASLE AFB	13.67	0.64	0.00	0.00	1.47	0.35	2.22	0.78	3.43	3.01	1.77	0.00	0.00	0.46	T	13.55	
DELTA RCH	9.75	0.36	0.00	0.00	0.76	0.52	2.40	0.23	2.58	2.11	0.79	0.00	0.00	0.43	0.00	9.82	
DENAIR					0.89	0.19	1.89	0.62	2.46	2.45	1.17	0.00	0.00	0.12	0.00	11.82	
DENAIR BARFIELD F S	12.27	0.69	0.00	0.00	1.32	0.40	2.33	0.52	2.55	3.06	1.35	0.00	0.00	0.46	0.00	11.63	
FANCHER RCH CAMP #3		-	NR	-	RE												
GUSTINE 5 SW	10.72	0.32	0.00	0.00	0.62	0.23	2.85	0.22	2.82	2.87	0.79	0.00	0.00	0.02	0.53	T	10.95
GUSTINE SNYDER	10.12	0.00	0.00	0.00	0.54	0.23	3.00	0.23	2.90	2.80	0.62	0.00	0.00	0.30	0.00	0.00	10.62
GUSTINE FOREMOST	11.86	0.37	0.00	0.00	0.74	0.04	2.85	0.77	2.01	4.59	0.49	0.00	0.00	0.00	0.58	0.00	12.07
GUSTINE 7 SW	10.84	0.30	0.00	0.00	0.72	0.18	2.79	0.73	2.50	2.73	0.89	0.00	0.00	0.01	0.44	T	10.99
NILMAR	10.03	0.17	0.00	0.00	0.86	0.20	2.48	0.40	2.56	2.54	0.63	0.00	0.00	0.03	0.46	0.02	10.37
LE GRAND 6 N	13.69	0.07	0.00	0.00	1.34	1.02	2.11	0.65	4.13	3.19	1.18	0.00	0.00	0.40	0.08	14.10	
LINDENWOOD CITY HALL		0.00	0.00	0.00	1.06	0.44	2.47	0.46	2.17	2.04	0.62	0.00	0.00	0.10	0.00	10.33	
LIVINGSTON 5 W	9.66	0.35	0.00	0.00	0.70	0.49	1.47	0.23	2.89	2.63	0.90	0.00	0.00	0.45	0.02	9.78	
LOS BANOS 5 S	8.71	0.84	0.00	0.00	0.87	0.32	1.77	0.16	2.50	1.45	0.80	0.00	0.00	0.20E	0.00E	8.07E	
LOS BANOS F S	8.84	0.40	0.00	0.00	0.67	0.43	2.10	0.12	2.45	1.69	0.98	0.00	0.00	0.04	0.22	0.01	8.71
MADERA 1 N	8.38	0.00	0.00	0.00	1.11	0.61	1.45	0.39	1.26	2.03	1.53	0.00	0.00	0.00	0.14	0.17	8.69
MENDOCINO 1 N	6.03	T	0.00	0.00	0.90	0.32	1.29	0.13	1.35	1.44	0.90	0.00	0.00	0.13	0.07	6.23	
MENDOCINO FARMS	5.47	0.17	0.00	0.00	0.97	0.09	1.00	0.14	0.81	0.75	0.00	0.00	0.00	0.17	0.33	5.84	
MERCED FINCHER RCH	13.14	0.18	0.00	0.00	1.05	0.55	2.06	0.77	4.09	3.47	1.17	0.00	0.00	0.00	0.04	13.40	
MODOESTO 6 SW	8.93	0.64	0.00	0.00	0.71	0.33	2.23	0.16	2.78	0.59	1.47	0.00	0.02	0.01	0.91	0.01	9.22
MODOESTO KTRB	NR	0.50B	0.00	0.00	RE												
ODDALE	13.70	0.83	0.00	0.00	1.45	1.13	1.90	0.83	3.03	3.80	0.73	0.00	T	0.00	0.43	T	13.30
ORESTIMA	10.96	0.25	0.00	0.00	0.65	0.22	2.68	0.47	2.38	3.14	0.97	0.00	0.00	0.67	0.15	11.53	
PANOCHE WATER DIST	7.13	0.05	0.00	0.00	0.58	0.24	1.54	0.12	2.83	1.40	0.42	0.00	0.00	0.10	T	7.23	
PATTERSON	11.16	0.63	0.00	0.00	0.56	0.27	2.78	0.20	2.17	3.56	0.99	0.00	0.00	0.68	0.01	11.22	
POGO CANAL CO NO	8.45	0.25	0.00	0.00	0.59	0.85	1.71	0.21	2.71	2.70	1.78	0.36	0.00	0.00	0.28	0.01	8.49
RIFTON	11.51	0.51	0.00	0.00	1.01	0.89	1.71	0.66	2.26	2.86	0.69	0.00	0.00	0.69	0.00	11.49	
SAN LUIS CANAL CO HQ	8.81	0.00	0.00	0.00	0.81	0.41	1.17	0.13	2.86	2.90	0.66	0.00	0.00	0.47	0.04	8.57	
SNELLING F S	15.35	0.34	0.00	0.00	0.39	0.33	2.36	0.82	2.36	3.44	1.33	0.42	0.00	T	0.61	0.00	15.62
SNELLING 3 WNW	0.25	0.00	0.00	RE													
SNOW RANCH	14.57E	0.00	0.00	0.00	*	*	3.50	1.33	3.73	4.38	1.63	0.00	0.00	0.00	0.70E	0.00E	15.27E
SOUTH DOG PALOS	7.81	0.06	0.00	0.00	0.54	0.35	1.50	0.20	2.94	1.51	0.71	0.00	0.00	0.04	0.23	0.04	8.06
TURLOCK 5 SW	13.13	0.60	0.00	0.00	1.10	0.58	2.82	1.23	2.81	3.59	0.40	0.00	0.00	0.60	0.02	13.15	
TURLOCK 8 WSW	11.93	0.40	0.00	0.00	0.88	0.30	2.18	0.58	2.52	4.02	1.05	0.00	0.00	0.75	0.00	12.28	
WESTLEY	11.61	0.45	0.00	0.00	0.64	0.26	1.93	1.34	2.44	3.46	1.09	0.00	0.00	0.68	0.01	11.85	
STANISLAUS RIVER B3																	
ANGELS CAMP	31.82	1.95	0.00	0.00	2.96	2.09	3.89	2.05	7.11	8.72	2.70	0.32	0.03	0.04	0.89	0.00	30.80
BEARDSLEY DAM	44.01	2.57	0.10	0.00	2.82	2.38	4.95	4.25	10.16	9.90	5.41	0.84	0.63	0.03	2.02	0.15	43.54
BELVIDERE - ALPINE	1.82	0.00	0.00	0.02	1.00	0.56	2.00	0.62	2.29	2.86	0.66	0.00	0.00	0.00	0.00	0.00	1.82
COLONIA	36.86	1.66	0.00	0.00	3.53	2.13	3.61	0.62	8.30	8.94	4.24	0.55	0.06	0.04	0.77	0.01	36.00
COPPERPOLIS	23.48E	1.49	0.00	0.00	2.10E	1.75	2.79	3.16	4.21	6.34	4.16	0.48	0.00	0.00	0.60	0.00	22.59
FIRECREST STRAWBERRY	51.26	2.33	0.24	0.00	3.19	2.50	5.28	4.10	13.36	10.82	7.59	0.88	0.95	0.00	2.11	0.03	50.81
SPRING GAP FOREBAY	46.49	2.62	0.07	0.00	3.43	2.35	5.22	4.59	11.63	9.08	6.24	0.65	0.61	0.00	2.00	0.02	45.82
TULLOCH OAM	22.24	1.61	0.00	0.00	1.45	1.75	2.45	1.57	5.16	6.33	1.90	0.00	0.02	0.00	0.65	0.00	21.28
TUOLUMNE RIVER B4																	
DON PEDRO RES	20.56	0.52	0.00	0.00	1.91	1.22	2.89	1.60	5.26	5.16	1.78	0.17	0.05	0.05	0.61	0.00	20.70
EARL IRVING 1 N	39.45	0.80	0.00	0.00	3.09	1.68	4.62	3.21	10.68	2.88	5.06	0.70	0.33	T	1.13	0.05	39.63
HORNOR MEADOW	54.4	0.00	0.00	0.00	1.97	1.56	2.97	5.43	13.61	11.11	6.08	0.60	0.39	0.00	0.27	0.11	57.75
MOCCASIN	30.33	0.82	0.02	0.00	2.22	1.26	3.70	1.63	13.61	11.11	6.08	0.34	0.21	0.01	0.46	0.03	29.99
TUOLUMNE MAIN YARD	42.39	1.91	0.00	0.00	3.94	2.12	3.81	3.57	12.25	9.36	4.84	0.48	0.11	0.03	1.22	0.00	41.73
MERCED RIVER B5																	
BEAR VALLEY	29.66	0.72	0.16	0.00	3.36	1.18	4.00	3.01	8.78	6.82	2.13	0.00	0.00	0.00	0.20E	0.00E	29.96
CACHEMAN VALLEY 3 NW		0.00	0.00	0.00	2.15	1.85	2.00	0.90	5.25	5.48	2.85	0.10	0.00	0.00	0.07	0.00	29.53
COUTLER GLEN FFS	29.26	1.59	0.00	0.00	1.95	1.72	2.94	0.30	8.95	9.48	2.70	0.00	0.00	0.03	0.32	0.05	28.07
GREELEY HILL 1 N	43.09	1.40	0.00	0.00	3.77	1.59	5.77	3.76	11.73	6.95	5.08	0.15	0.15	0.06	0.73	0.12	42.60
HORNITOS ERICKSON RCH	23.55	0.51	0.00	0.00	1.88	1.23	3.06	2.15	6.50	5.42	2.76	0.04	0.00	0.00	0.00	0.00	23.04
HORNITOS GILES RCH	NR	NR	NR	NR	RE												
HORNITOS	18.94E	0.40E	0.00E	0.00E	1.14E	0.68	2.63	4.28	3.53	4.43	1.83	0.02E	0.00E	0.00E	0.00E	0.00E	18.54E
JERSEYDALE G S	46.50	0.91	0.00	0.00	1.95	2.82	5.74	6.38	13.61	11.11	6.13	0.51	0.04	0.00	0.39	0.13	46.11
HARPOPS REYNOLDS	38.70	0.74	0.00	0.00	3.89	2.30	5.46	2.62	10.70	7.57	4.90	0.30	0.02	0.00	0.15	0.12	36.23
HARPOPS R 342.4E	0.60E	0.00E	0.00E	3.49	1.13	3.86	3.22	9.81	7.40	4.17	2.30E	0.00E	0.00E	0.00E	0.10E	0.00E	32.93E
GARBURST	34.89E	0.10	0.00	0.00	2.50	1.48	5.10	4.14	7.77	6.00	4.60E	0.30E	0.00E	0.00E	0.36E	0.03E	35.18E
GARBURST #2	33.75	0.05	0.00	0.00	3.05	1.64	5.47	3.23	6.31	6.98	2.87	4.82	0.32	0.00	0.42	0.04	34.14
RAYMOND 10 N	26.37	0.37	0.00	0.00	2.68	1.38	2.86	2.01	7.10	6.74	2.89	0.22	T	0.00	0.06	0.14	26.08
RAYMOND 12 NNE	22.71E	0.30E	0.00E	0.00E	2.71	0.20	5.00	2.25	2.65	6.09	4.27	0.37	0.00	0.00	0.07	0.17	22.65
TRIANGLE-DESMOND	NR	0.54	0.00	0.00	RE												
WHITE ROCK-PRESTON	19.41E	0.40E	0.00E	0.00E	1.96E	0.81	2.95	1.47	5.19	4.00	2.33	0.30E	0.00	0.00	0.00	0.20E	19.21
SAN JOAQUIN RIVER B7																	
BIG CREEK PH 1	36.33	0.13	0.00	0.00	3.43	1.87	5.60	2.81	6.73	9.27	5.46	0.91	0.12	0.00	0.99	0.46	37.65
BIG CREEK PH 2	34.25	0.06	0.00	0.00	3.63	1.56	5.15	2.20	6.45	8.20	4.45	0.65	0.00	0.00	0.75	0.32	37.22
BIG CREEK PH 3	37.26	0.06	0.00	0.00	3.40	1.56	3.12	2.07	5.02	7.72	3.97	0.42	0.00	0.00	0.53	0.04	37.45
BIG CREEK PH 8	28.79	0.02	0.00	0.00	3.62	1.58	3.87	2.85	5.32	7.86	3.23	0.44	0.00	0.00	0.54	0.19	29.50
CRANE VALLEY PH	41.79	0.22	0														

TABLE A-2 (Cont.)
PRECIPITATION DATA

PRECIPITATION IN INCHES

STATION NAME	1974						1975						TOTAL OCT 1 TO SEPT 30				
	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP		
TULARE LAKE BASINS																	
TULARE LAKE VAL FL	0.30	0.13	0.00	1.00	0.71	1.37	1.75	0.1*	1.30	5.98	1.61	1.06	0.30	1.08	0.13	6.08	
ARVIN	6.03	0.00	0.00	0.00	0.58	0.42	1.38	0.0*	1.88	1.35	0.42	0.00	0.00	0.00	0.04	6.07	
AVENAL ORCHARD	2.10E	0.00	0.00	0.00	0.08	0.00	0.00	0.00	1.21	1.24	0.24	0.00	0.00	0.00	0.00	0.00	3.08
BLACKMILLS CORNER 2 NW	2.10E	0.00	0.00	0.00	0.24	0.67	1.03	0.00	1.04	0.80	0.59	0.00	0.00	0.00	0.02	0.00	3.08
BURNETT VISTA RCH MGL 2	4.69	0.00	0.00	0.00	0.59	0.65	1.01	0.00	1.29	0.66	0.49	0.00	0.00	0.00	0.00	0.00	4.69
CANTU RCH	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
COALINGA WTP	0.00	0.00	0.00	0.34	0.32	1.52	0.04	NR	NR	NR	NR	0.00	0.00	0.00	0.02	0.00	0.00
COALINGA CDF	4.82	0.00	0.00	0.00	0.49	0.08	0.66	*	1.50	1.47	0.42	0.00	0.01	0.07	0.03	4.93	
COIT RCH HQ	5.41	0.00	0.00	0.00	0.50	0.58	0.89	0.10	1.61	0.88	0.88	0.00	0.00	0.11	0.51	6.07	
CORCORAN EL RICO 1	5.23	0.00	0.12	0.00	0.68	0.06	1.49	0.05	1.00	1.09	0.58	0.00	0.00	0.00	0.52	5.63	
DELAND GOVT CAMP	6.44	0.00	0.00	0.00	1.50	0.40	0.85	0.00	1.59	1.01	1.01	0.00	0.00	0.00	0.02	6.46	
DEVILS DEN SLF	5.51	0.00	0.00	0.00	0.45	0.36	1.87	0.00	1.32	0.89	0.62	0.00	0.00	0.00	0.17	5.68	
DEVILS HORN	6.98	0.00	0.00	0.00	1.00	0.90	0.97	0.00	1.07	0.50	0.51	0.00	0.00	0.00	0.00	7.07	
DIMMA ALTA 1 D	8.27	0.06	0.00	0.00	1.37	0.29	1.54	0.61	1.68	1.97	0.75	0.00	0.00	0.01	0.03	8.25	
FIVE POINTS DIENER	4.13	0.00	0.00	0.00	0.39	0.08	1.23	0.07	0.76	1.45	0.09	0.00	0.00	0.00	0.03	4.22	
FOUNTAIN SPRINGS FS	7.75	0.00	0.00	0.00	1.18	0.67	1.04	0.47	2.62	1.02	0.75	0.00	0.00	0.00	0.00	0.00	7.75
FRESNO CO WESTSIDE FD	4.51	0.00	0.00	0.00	0.29	0.06	1.13	T	0.86	1.37	0.80	0.00	0.00	0.01	0.04	0.02	4.58
FRESNO DWR	7.52	0.00	0.00	0.00	1.20	0.40	1.38	0.64	0.98	2.29	0.61	0.00	0.02	0.00	0.05	0.08	7.65
FRESN STATE UNIV	8.84	0.00	0.00	0.00	1.41	0.56	1.59	0.92	1.28	2.42	0.66	0.00	0.00	0.00	0.05	0.08	8.97
GIN YARD	4.44	0.00	0.00	0.00	0.70	0.70	1.03	0.00	0.96	0.81	0.24	0.00	0.00	0.00	0.00	0.00	4.44
HANFORD REFINERY	6.64	0.00	T	0.00	1.31	1.30	1.55	0.11	1.78	1.07	0.63	0.00	0.00	0.00	0.00	2.35	8.99
HURON RCH	3.44	0.00	0.00	0.00	0.32	0.04	1.05	0.07	0.64	1.12	0.20	0.00	0.00	0.00	0.00	0.00	3.44
HUNTER MFG	4.42	0.00E	0.00	0.00	0.21	0.01	0.61	0.00	0.22	0.29	0.00	0.00	0.00	0.00	0.04	0.00	3.50
IVANHOE 1 D	9.98	0.00	0.00	0.00	1.96	1.15	1.71	0.56	1.74	2.06	0.80	0.00	0.00	0.00	0.07	10.05	
KETTELMAN CITY	4.84	0.00	0.00	0.00	0.34	0.05	1.10	0.02	1.25	1.59	0.51	0.00	0.00	0.00	0.28	0.24	5.36
KETTELMAN HILLS	5.67	0.00	0.00	0.00	0.72	1.27	1.09	0.06	0.81	1.21	1.63	0.00	0.00	0.00	0.00	0.04	5.71
KINGSBURG	6.65	0.00	0.00	0.00	1.32	0.27	1.29	0.17	1.34	1.49	0.77	0.00	0.00	0.00	0.34	7.05	
LOST MILLS DWR	3.94	0.00	0.00	0.00	0.70	0.10	1.31	0.03	1.27	0.42	0.11	0.00	0.00	0.00	0.00	0.00	3.94
MAQUENDA	5.82	0.00	0.00	0.00	0.90	0.50	0.66	0.13	1.56	0.64	1.15	0.00	0.00	0.00	0.07	0.00	5.89
MENDOTA MARIETTA RCH	4.51	0.02	0.00	0.00	0.27	0.44	0.89	0.13	1.34	0.75	0.67	0.00	0.00	0.00	0.12	0.06	4.70
NORTH RIVER	5.20	0.00	0.00	0.00	0.90	0.53	1.46	0.00	0.99	0.97	0.35	0.00	0.00	0.00	0.09	0.00	5.29
OLIFIELD FS	6.36	0.00	0.00	0.00	0.68	0.11	1.78	0.00	1.25	1.77	0.61	0.00	0.00	0.00	0.00	0.00	6.28
POTTERVILLE 3 W	3.29	0.00	0.00	0.00	1.07	0.07	1.32	0.00	1.57	1.00	0.00	0.00	0.00	0.00	0.00	0.00	3.50
RECTOR	8.42	0.00	0.00	0.00	1.53	0.00	1.56	0.37	1.38	1.87	0.71	0.00	0.00	0.00	0.03	0.45	
REELEY MFVD	9.14	0.00	0.00	0.00	1.74	0.63	1.61	0.60	1.54	2.27	0.75	0.00	0.00	0.00	0.04	0.52	9.70
RUTSDALE	6.06	0.00	0.00	0.00	0.99	0.10	1.15	0.16	0.88	2.19	0.59	0.00	0.00	0.00	0.05	0.08	6.19
SANGER 1 NE	8.67	0.00	0.00	0.00	1.50	0.63	1.31	0.49	2.14	2.04	0.56	0.00	0.00	0.00	0.10	0.00	8.83
SANGER RS	8.81	0.04	0.00	0.00	1.60	0.55	1.67	0.39	1.36	2.54	0.66	0.00	0.00	0.00	0.12	0.00	8.94
SAN JOAQUIN	4.63	0.00	0.00	0.00	0.71	0.28	1.10	0.08	0.93	1.09	0.44	0.00	0.00	0.00	0.23	0.07	4.93
SOUTH BELMIRE	4.29	0.00	0.00	0.00	0.67	0.28	1.14	0.00	0.97	0.75	0.48	0.00	0.00	0.00	0.01	0.00	4.30
SOUTH LAKE FARMS HQ	4.84	0.00	0.00	0.00	0.53	1.18	1.39	0.00	1.26	0.73	0.81	0.00	0.00	0.00	0.06	0.00	4.90
TRANQUILLITY GLOZT	4.63	0.03	0.00	0.00	0.55	0.29	1.07	0.09	1.09	1.17	0.36	0.00	0.00	0.00	0.05	0.00	20.91
U S COTTONFIELD STA	7.01	0.00	0.00	0.00	1.01	0.20	1.32	0.23	1.41	1.11	0.30	0.00	0.00	0.00	0.09	0.00	20.91
VESTAL	4.94	0.02	0.00	0.00	1.11	0.18	1.12	0.08	1.34	0.51	0.58	T	0.00	0.00	0.02	0.01	4.95
WILBUR DITCH	3.81	0.00	0.00	0.00	0.58	0.20	1.32	0.00	0.99	0.72	0.00	0.00	0.00	0.00	0.00	0.00	7.01
WIND GAP	7.41	0.00	0.08	0.00	1.20	0.65	0.96	T	1.23	1.66	1.43	0.00	0.00	0.00	0.23	0.19	7.75
WINGS RIVER C1																	
BLASINGAME	20.76	0.00	0.00	0.00	2.37	1.56	3.10	1.67	4.37	5.69	2.00	0.00	T	0.00	0.05	0.10	20.91
MITCHELL MEADOW	37.50	0.00E	0.00	0.00E	1.50	1.10	5.50	3.00	9.00	11.00	6.50	0.00	0.00	0.00	0.00	0.00	37.50
PINEHORN R S	27.95	0.00	0.00	0.00	1.20	1.20	3.01	2.24	5.46	4.00	3.00	0.00	0.00	0.00	0.00	0.00	27.95
VALLEY VALLEY-PRESNO	10.43	0.00	0.00	0.00	2.02	2.26	2.73	1.01	5.56	4.11	1.03	0.00	0.00	0.00	0.06	0.00	18.49
STATE LAKE	30.00	0.00E	0.00	0.00E	0.50	2.00	4.50	1.50	7.00	9.00	4.00	1.00	0.50	0.00	0.00	0.00	30.00
TRIMMER R S	24.85	0.08	0.00	0.00	2.31	1.63	3.14	1.98	5.14	7.91	2.60	0.00	0.00	0.00	0.07	0.00	24.98
WEST WOODCHUCK	41.50	0.00E	0.00	0.00E	1.50	0.50	6.50	4.00	11.00	10.50	6.00	1.00	0.50	0.00	0.00	0.00	41.50
WISHON LAKE	41.47	0.39	0.63	0.00	2.27	1.45	5.14	2.88	11.24	10.06	5.95	1.46	0.00	0.00	0.75	0.10	41.30
KAWeah River C2																	
KAWeah PH 3	Inc.	0.00	0.00	0.00	2.20	0.21	RE	1.88	5.07	6.76	2.68	T	0.00	0.00	0.01	0.06	22.97
MIRAMONTE H C	22.90	T	0.00	0.00	2.96	1.18	2.37	1.88	2.31	2.33	1.47	0.00	0.00	0.00	0.05	0.00	22.97
MONTEREY R S	12.32	0.00	0.00	0.00	1.79	1.18	3.97	2.53	11.0	12.0	0.02	0.00	0.00	0.00	0.05	0.00	12.67
WTAKER FOREST	37.08	0.22	0.00	0.00	3.19	1.18	5.27	3.07	8.22	11.20	4.04	0.61	0.08	T	0.48	0.50	37.80
TULE RIVER C3																	
SUCCESS DAM	11.84	0.03	0.02	0.00	2.01	0.92	1.34	0.48	3.30	2.43	1.20	0.03	0.00	T	0.02	0.06	11.87
TULE RIVER INTAKE	27.57	0.08	0.00	0.00	3.01	1.91	2.68	1.74	6.40	7.46	3.51	0.13	0.04	0.00	0.05	0.06	28.06
TULE RIVER PH	17.94	0.01	0.00	0.00	2.67	1.27	1.76	1.19	4.53	4.53	1.86	0.12	0.00	0.00	0.01	0.01	17.94
GREENHORN MOUNTAIN C4																	
WOODY	11.56	0.00	0.00	0.00	1.76	0.81	1.51	0.66	2.09	3.02	1.70	0.01	0.00	0.00	0.02	0.10	11.68
TERM RIVER C5																	
ISABELLA DAM	10.91	0.78	0.00	0.00	2.30	0.10	1.96	0.65	1.82	2.70	0.56	0.04	0.00	0.00	0.03	0.00	12.01
KERN R CANYON	1.56	0.00	0.00	0.00	2.07	0.48	0.93	0.35	2.26	2.68	2.31	0.00	0.00	0.00	0.03	0.00	14.66
KERN R 3 INTAKE	14.40	0.00	0.00	0.00	1.66	0.19	2.71	1.02	3.90	3.68	1.09	0.00	0.05	0.00	0.50	0.00	14.80
ONYX	5.96	0.13	0.00	0.00	1.31	0.00	1.41	0.00	1.55	1.41	0.17	0.00	0.00	0.00	0.00	0.00	5.85
TEHACHAPI MOUNTAINS C6																	
TEHACHAPI-CUMMINGS W D	NR	NR	NR	NR	2.25	0.46	2.12	0.28	1.03	2.46	1.23	0.10	0.00	0.00	0.05	0.08	10.08
KEENE R S	10.99	0.00	0.00	0.													

TABLE A-2 (Cont.)
PRECIPITATION DATA

PRECIPITATION IN INCHES

STATION NAME	TOTAL JULY 1 TO JUNE 30	1974						1975						TOTAL OCT 1 TO SEPT 30			
		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	
TULARE L BM WESTSIDE C7	(Cont.)																
COALINGA ROBERTS RCH	15.05	0.00	0.00	0.00	0.51	0.25	3.15	0.07	6.04	3.50	1.53	0.00	7.00	0.00	0.00	0.30	15.35
FELLOWS	4.84	0.00	0.00	0.00	0.53	0.35	1.17	0.00	1.44	0.76	0.59	0.00	0.00	0.00	0.08	0.00	4.92
MARICOR FS	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
MCKITTRICK FS	3.97	0.00	0.00	0.00	0.38	0.45	0.61	0.00	1.34	0.70	0.49	0.00	0.00	0.00	0.02	0.04	4.03
ZAFF RTMR	4.99	0.06	0.00	0.00	1.08	0.39	0.87	0.00	0.79	0.80	1.00	0.00	0.00	0.00	0.09	0.00	5.02

TABLE A-3
STORAGE GAGE PRECIPITATION DATA

SAN JOAQUIN VALLEY

Station	Agency	1974-75 Season			
		Measurement Period	Precipitation In Inches		
SAN JOAQUIN RIVER BASIN					
STANISLAUS RIVER B3					
HIGHLAND LAKES	DEPT OF WATER RESOURCES	7-10-74	7-10-75	32.6	
LAKE ALPINE	DEPT OF WATER RESOURCES	7-10-74	7-10-75	66.3	
MT. REBA	DEPT OF WATER RESOURCES	11- 7-74	9-24-75	43.24	
TUOLUMNE RIVER B4					
TIOGA PASS	DEPT OF WATER RESOURCES	7- 9-74	7- 9-75	40.26	
TUOLUMNE MEADOW	DEPT OF WATER RESOURCES	7- 9-74	7- 9-75	36.05	
MERCED RIVER B5					
OSTRANGER LAKE	YOSEMITE NATL PARK SERVICE	7-25-74	8-26-75	57.45	
SNOW FLATS	DEPT OF WATER RESOURCES	7- 9-74	7- 9-75	57.2	
TENAYA LAKE	DEPT OF WATER RESOURCES	7- 9-74	7- 9-75	46.6	
SAN JOAQUIN RIVER B7					
CHIQUITO CREEK	DEPT OF WATER RESOURCES	7- 8-74	7-22-75	49.85	
CLOVER MEADOW	DEPT OF WATER RESOURCES	7- 8-74	7-22-75	49.1	
FLORENCE LAKE	SO CALIF EDISON COMPANY	9-20-74	9-22-75	20.29	
KAISER MEADOW	SO CALIF EDISON COMPANY	9-24-74	9-18-75	45.62	
MAMMOTH POOL	SO CALIF EDISON COMPANY	9-23-74	9-19-75	33.27	
ROSE MARIE MEADOW	SO CALIF EDISON COMPANY	9-17-74	10- 7-75	38.11	
VERMILLION VALLEY	SO CALIF EDISON COMPANY	9-11-74	9-16-75	21.70	
TULARE LAKE BASIN					
KINGS RIVER C1					
DUSY BENCH	DEPT OF WATER RESOURCES	8-27-74	9-15-75	24.58	
MORaine CREEK	U S CORPS OF ENGINEERS			Not serviced	
RATTLESNAKE CREEK	U S CORPS OF ENGINEERS	9-10-74	9- 9-75	41.05	
SUMMIT MEADOW	DEPT OF WATER RESOURCES	7-19-74	7-24-75	54.35	
VIDETTE MEADOW	U S CORPS OF ENGINEERS	9-10-74		Not serviced	
KAWeah RIVER C2					
ATWELL	U S CORPS OF ENGINEERS	10- 7-74	9-10-75	35.70	
BEARTRAP MEADOW	U S CORPS OF ENGINEERS	9-10-74	9- 8-75	42.60	
GIANT FOREST	U S CORPS OF ENGINEERS	10- 8-74	9-10-75	38.45	
HOCKETT MEADOW	U S CORPS OF ENGINEERS	10- 9-74	9-11-75	33.90	
TULE RIVER C3					
EAGLE CREEK	U S CORPS OF ENGINEERS	9-24-74	9-23-75	35.90	
HOSACK (RADIO)	U S CORPS OF ENGINEERS	9-25-74	9-25-75	42.10	
MOUNTAIN HOME 2	U S CORPS OF ENGINEERS	9-26-74	9-25-75	36.65	
ROGERS CAMP	U S CORPS OF ENGINEERS	9-26-74	9-24-75	35.75	
KERN RIVER C5					
CHAGOOPA	U S CORPS OF ENGINEERS	10- 9-74	9-19-75	21.65	
CRABTREE MEADOW	DEPT OF WATER RESOURCES	9-12-74	9- 6-75	20.00	
PASCOES	U S CORPS OF ENGINEERS	9-24-74	9-23-75	33.55	
PORTUGUESE MEADOW	U S CORPS OF ENGINEERS	9-24-74	8-18-75	42.80	
TUNNEL R S	DEPT OF WATER RESOURCES	9-17-74	9-11-75	19.52	
WET MEADOW	U S CORPS OF ENGINEERS	9-25-74	9-23-75	33.30	
TULARE LAKE BASIN - WESTSIDE C7					
OILFIELDS JOAQUIN RDG	DEPT OF WATER RESOURCES	10-11-74	7-23-75	14.05	

APPENDIX B
SURFACE WATER MEASUREMENTS



INTRODUCTION

This appendix presents surface water data for the 1975 water year, which is from October 1, 1974 to September 30, 1975. The data presented consist of daily mean discharge, daily mean gage height, gaging station location, diversion quantities, imported water to report area, exported water from report area, summary tables of monthly and annual unimpaired runoff from major streams, and corrections and revisions to previously published reports.*

Each station in this appendix has been assigned an identification number. The first two digits denote the drainage basin as shown below. The remaining digits further identify each station.

HYDROGRAPHIC AREA B		HYDROGRAPHIC AREA C	
SAN JOAQUIN RIVER BASIN		TULARE LAKE DRAINAGE BASIN	
B0	- San Joaquin Valley Floor	C0	- Tulare Lake Valley Floor
B3	- Stanislaus River	C1	- Kings River
B4	- Tuolumne River	C2	- Kaweah River
B5	- Merced River	C3	- Tule River
B6	- Fresno-Chowchilla Rivers	C4	- Greenhorn Mountains
B7	- San Joaquin River	C5	- Kern River
B8	- San Joaquin Valley on West Side	C6	- Tehachapi Mountains
		C7	- Tulare Lake Basin on West Side

In addition to data collected and published by the Department of Water Resources in this appendix, the U. S. Geological Survey collects and publishes data on many additional gaging stations for the same report area. This work is done under a federal-state cooperative contract, or through cooperative arrangements with other local or government agencies. The data published in the following reports together with this report present a comprehensive analysis of the water resources for the area:

1. Water Resources Data for California
Part 1, Surface Water Records
Volume 2: Northern Great Basin and Central Valley
United States Department of the Interior
Geological Survey
Prepared in cooperation with the California Department of Water Resources
and with other agencies.
2. Kings River Watermaster Report
Kings River Water Association
3. Water Supply
Fresno Field Division, U. S. Bureau of Reclamation
4. Bulletin 120, Summary of Water Conditions in California,
Department of Water Resources
5. Bulletin 157, Index of Stream Gaging Stations In and Adjacent to California, 1970,
Department of Water Resources
This index contains the period of record--with number of years missing--and more
information for 800^f stations in the San Joaquin Valley area. The index also
identifies the agency from which a particular record may be obtained.

*Figure B-1 shows station locations

ALPHABETICAL INDEX TO TABLES

DAILY MEAN DISCHARGE, DAILY MEAN GAGE HEIGHT

	Page
Daily Mean Discharge	Daily Mean Gage Height
Avenal Creek at Highway 33	91
Bean Creek near Coulterville	60
Bear Creek below Bear Reservoir	53
at McKee Road near Merced	54
at Merced Irrigation District West Boundary	55
Buena Vista Creek near Taft	92
Burns Creek below Burns Reservoir	56
Campbell-Moreland Ditch above Porterville	82
Chowchilla River, West Fork near Mariposa	48
Cross Creek below Lakeland Canal #2	78
Delta-Mendota Canal near Tracy	40
to Mendota Pool	41
Dry Creek near Modesto	69
Eastside Bypass near El Nido	49
Fresno River Eight Miles West of Madera	47
Lewis Fork near Oakhurst	44
Friant-Kern Canal Delivery to Porter Slough	79
to Tule River	80
Hubbs-Miner Ditch at Porterville	87
James Bypass near San Joaquin	39
Kern River at Second Point	90
near Bakersfield	89
Kings River, South Fork, below Empire Weir #2	77
Mariposa Creek near Catheys Valley	50
below Mariposa Reservoir	51
Maxwell Creek at Coulterville	61
Merced River at Cressey	64
below Snelling	63
Miami Creek at Highway 49 near Ahwahnee	106
near Oakhurst	105
Musick Creek #1 near Shaver Lake	46
Musick Creek #2 near Shaver Lake	45
Mustang Creek near Ballico	76
Orestimba Creek below Highway 33	75
Owens Creek below Owens Reservoir	65
Panache Drain near Dos Palos	66
Poplar Ditch near Porterville	52
Porter Slough at Porterville	58
Porter Slough Ditch at Porterville	86
Salt Slough near Stevenson	83
San Joaquin River near Dos Palos	84
at Fremont Ford Bridge	59
below Friant	43
at Maze Road Bridge	62
near Mendota	38
near Newman	71
at Patterson Bridge	42
near Stevenson	104
near Vernalis	102
Stanislaus River at Koetitz Ranch	113
at Orange Blossom Bridge	107
at Ripon	67
Tulare Lake	57
Tule River below Porterville	108
Tuolumne River at Hickman Bridge	74
at Modesto	103
at Tuolumne City	117
Vandalia Ditch near Porterville	73
Woods-Central Ditch near Porterville	72
	116
	114
	115
	101
	85
	68
	109
	111
	70
	112
DIVERSIONS	88
Deliveries from California Aqueduct	98
Deliveries from Central Valley Project Canals	96
East Side Canals and Irrigation Districts	95
San Joaquin River, Fremont Ford Bridge to Gravelly Ford	94
IMPORTS AND EXPORTS	99
CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS	118
UNIMPAIRED RUNOFF	35
Annual	36

HYDROGRAPHIC AREA AND STREAM BASIN INDEX TO SURFACE WATER MEASUREMENT STATIONS

Station Number

Page

HYDROGRAPHIC AREA B

SAN JOAQUIN VALLEY FLOOR

	Daily Mean Discharge	Daily Mean Gage Height
B00435		
0470	49	
0525	59	
0770	65	
0975	41	
3115	58	
3125	73	116
3175	115	
4105	72	114
4120	70	112
4130		111
4150	69	110
5155	68	109
5170	64	106
5518	63	105
5525	55	
5570	54	
6170	53	
6725	52	
7020	47	
7040	74	116
7200	71	113
7300	67	108
7375	62	104
7400	57	103
7610	43	
7710	42	
7885	38	
8735	66	102
	Orestimba Creek below Highway 33	

MERCED RIVER

B51250	Maxwell Creek at Coulterville	61
2580	Bean Creek near Coulterville	60
6100	Burns Creek below Burns Reservoir	56

FRESNO - CHOWCHILLA RIVERS

B62100	Mariposa Creek below Mariposa Reservoir	51
2400	near Cathneys Valley	50
4300	Chowchilla River, West Fork near Mariposa	48
7285	Miami Creek at Highway 49 near Ahwahnee	46
7300	near Oakhurst	45
7325	Fresno River, Lewis Fork near Oakhurst	44

SAN JOAQUIN RIVER

B71406	Musick Creek #1 near Shaver Lake	76
1408	Musick Creek #2 near Shaver Lake	75

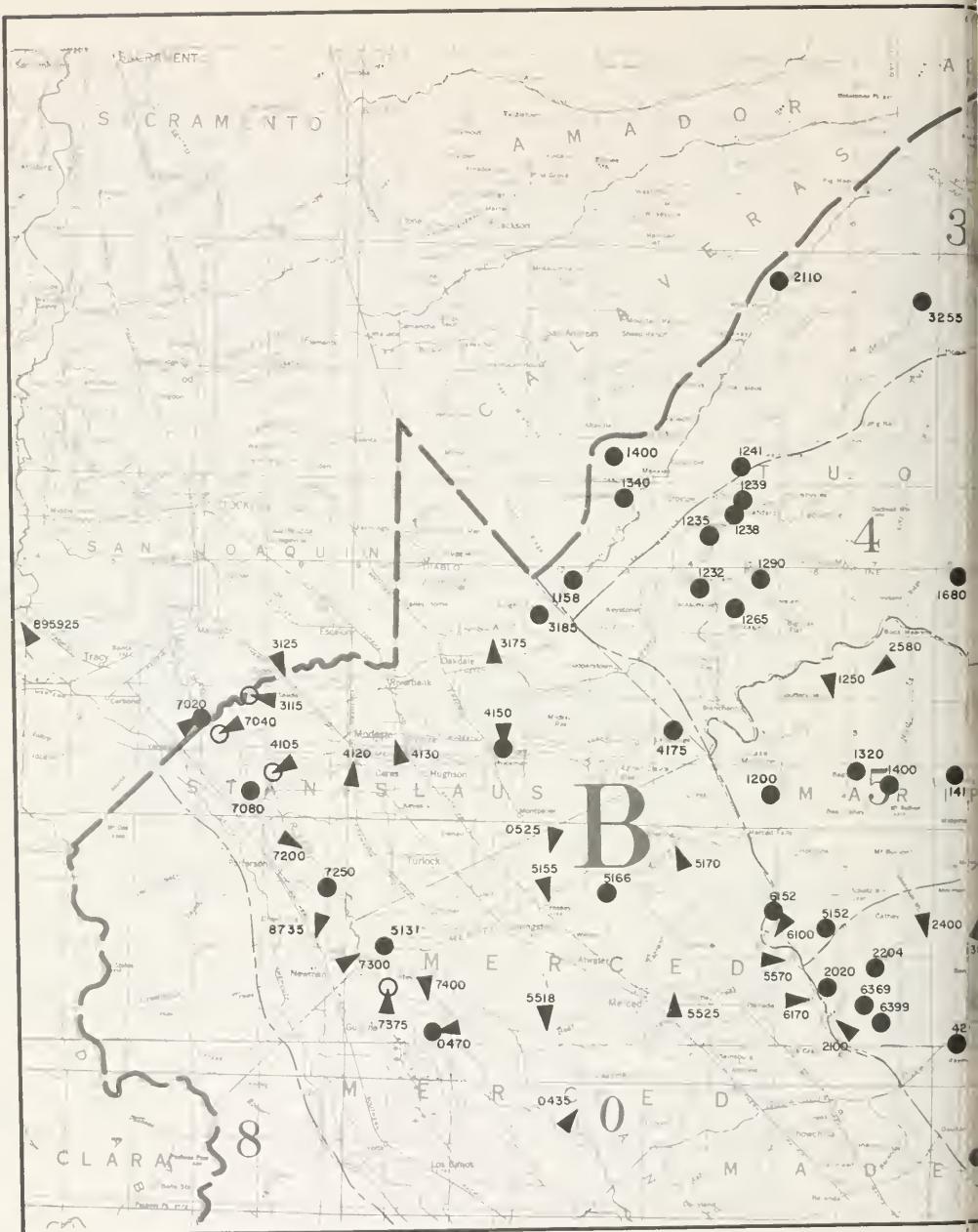
SACRAMENTO - SAN JOAQUIN DELTA

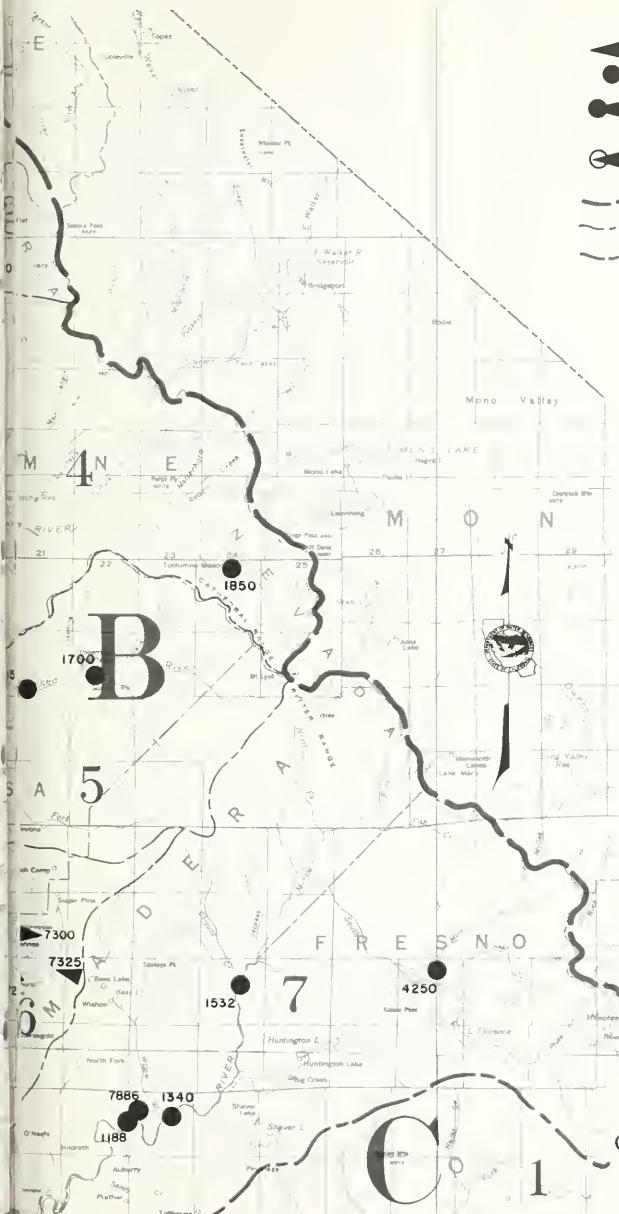
B95925	Delta-Mendota Canal near Tracy	40
--------	--------------------------------	----

HYDROGRAPHIC AREA C

TULARE LAKE VALLEY FLOOR

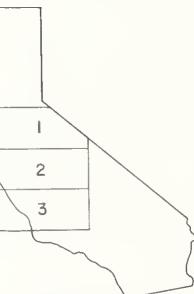
C00200	James Bypass near San Joaquin	39
1120	Kings River, South Fork, below Empire Weir #2	77
2602	Cross Creek below Lakeland Canal #2	78
3110	Tulare Lake	101
3169	Tule River below Porterville	81
3182	Porter Slough at Porterville	83
3913	Friant-Kern Canal Delivery to Porter Slough	79
3923	to Tule River	80
3925	Hubbs-Miner Ditch at Porterville	87
3948	Woods-Central Ditch near Porterville	88
3960	Poplar Ditch near Porterville	86
3965	Vandalia Ditch near Porterville	85
3970	Campbell-Moreland Ditch above Porterville	82
3984	Porter Slough Ditch at Porterville	84
5150	Kern River near Bakersfield	89
5180	at Second Point	90
7115	Avenal Creek at Highway 33	91
7120	Buena Vista Creek near Taft	92



**LEGEND**

- ▲ SURFACE WATER MEASUREMENT STATIONS
- SURFACE WATER QUALITY STATIONS
- ◆ SURFACE WATER MEASUREMENT AND QUALITY SURVEILLANCE STATIONS
- SURFACE WATER MEASUREMENT AND QUALITY SURVEILLANCE STATIONS WITH ELECTRICAL CONDUCTIVITY RECORDER
- AREA OF REPORT
- - HYDROGRAPHIC UNIT BOUNDARY
- - - MAJOR DRAINAGE BOUNDARY

NOTE:
INDEX TO SURFACE WATER MEASUREMENT
STATIONS LOCATED ON PAGE 27
QUALITY SURVEILLANCE STATIONS SHOWN
ON PAGE 164



KEY TO SHEETS

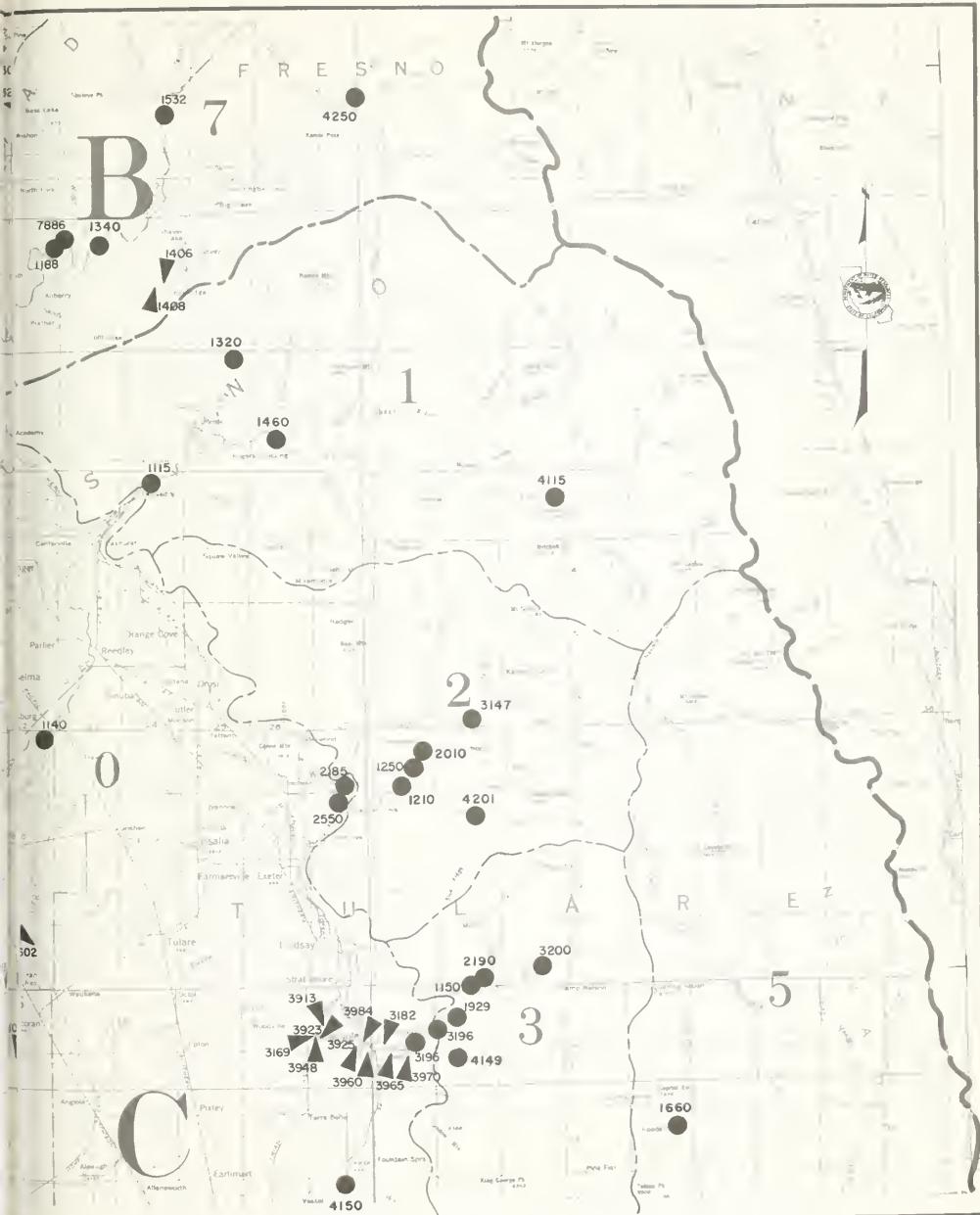
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN DISTRICT

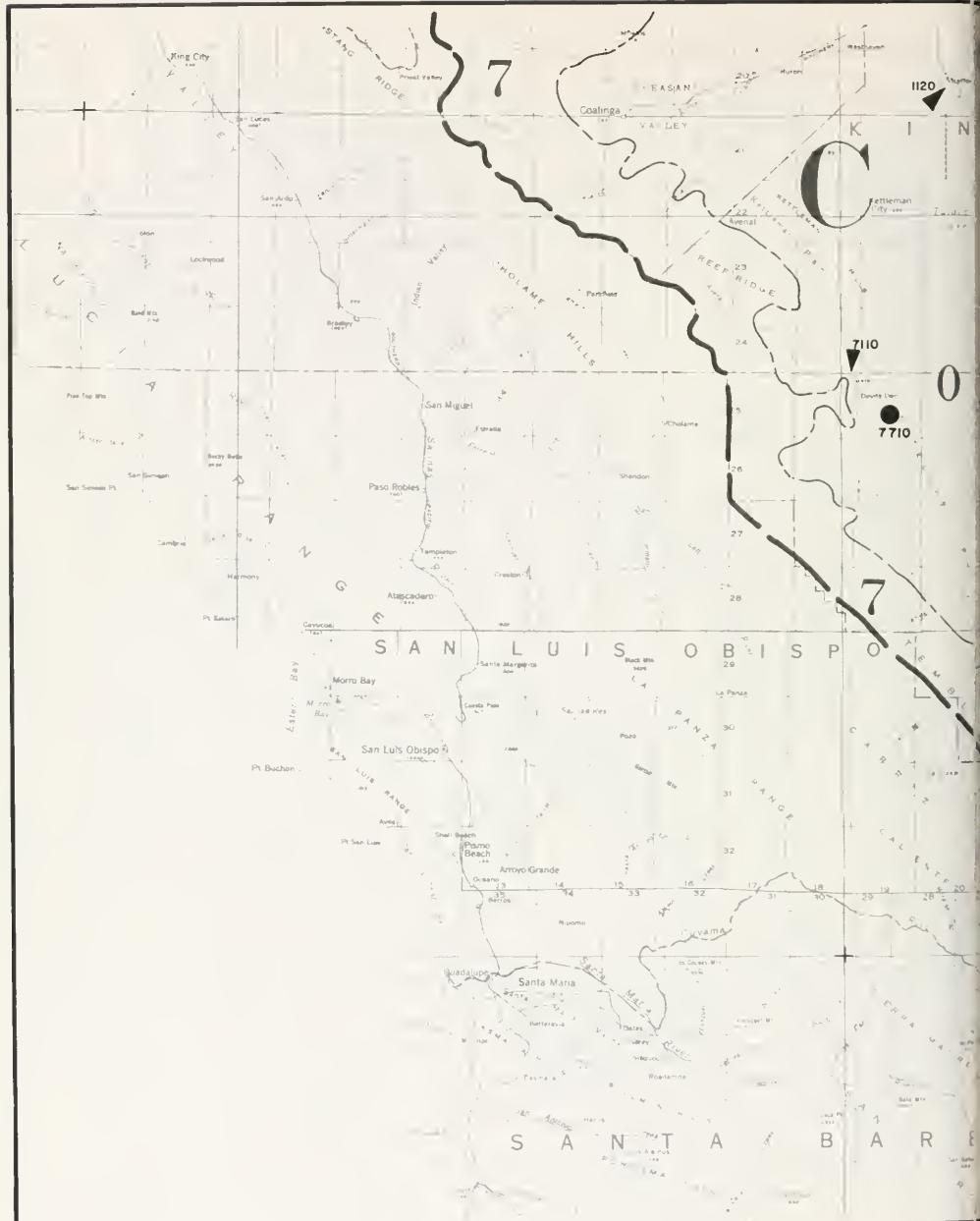
HYDROLOGIC DATA 1975

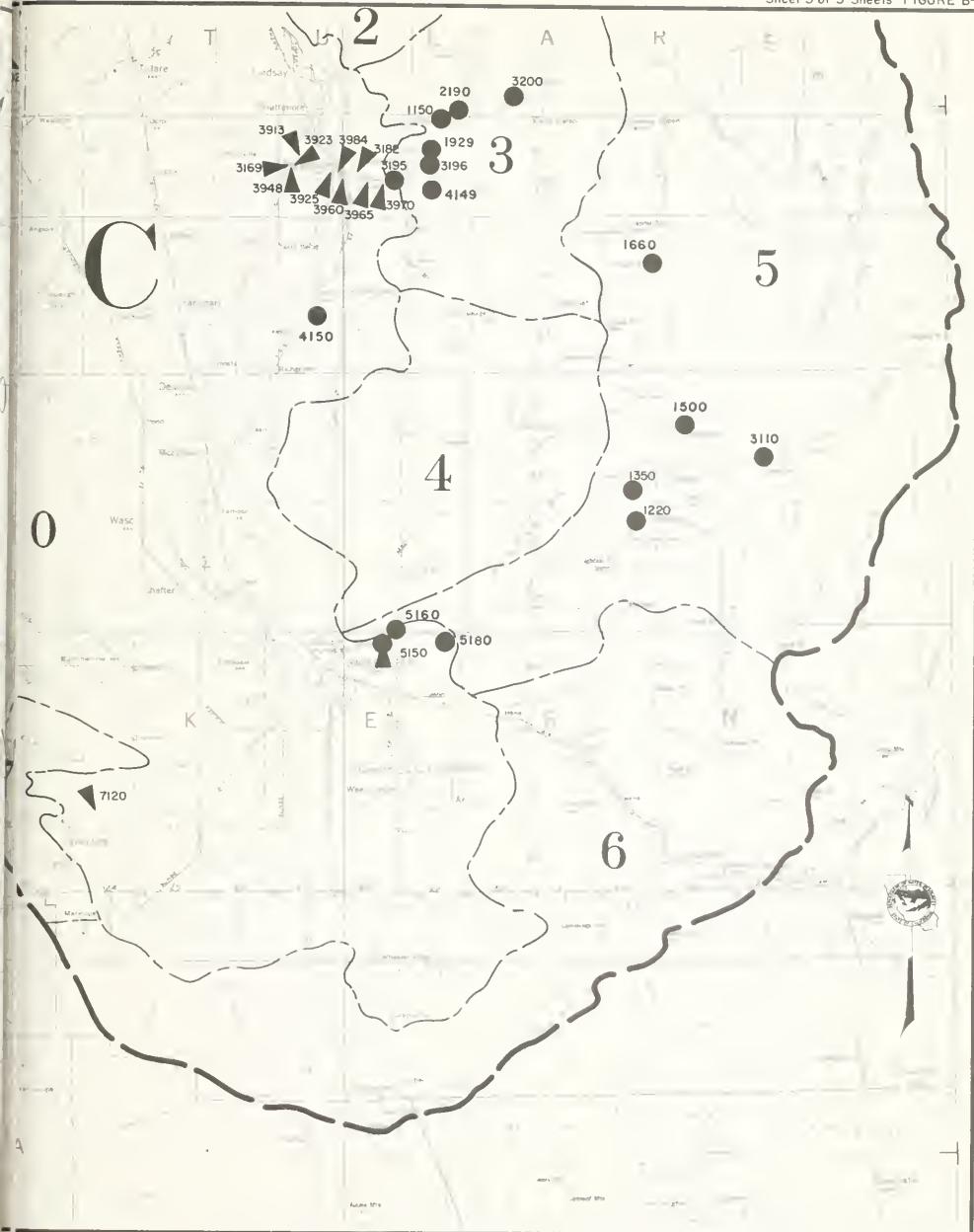
**SURFACE WATER MEASUREMENT
AND
QUALITY SURVEILLANCE STATIONS**

SCALE OF MILES









UNIMPAIRED RUNOFF

Unimpaired runoff is defined as the flow that occurs naturally at a point in a stream if there were: (1) no upstream controls such as dams or reservoirs; (2) no artificial diversions or accretions; and, (3) no change in ground water storage resulting from development. The computed natural or unimpaired runoff values are considered to be the flows that would occur if no impairments were upstream from the measurement points.

Table B-1 presents annual unimpaired runoff in percent of average for major streams.

Table B-2 presents monthly unimpaired runoff in percent of average for major streams.

The average unimpaired runoff is in thousands of acre-feet and was computed from the 50-year period October 1920 through September 1970.

TABLE B-1

ANNUAL UNIMPAIRED RUNOFF

In percent of average

Water Year	Stanislaus River Inflow to Melones	Tuolumne River Inflow to Don Pedro	Merced River Inflow to Exchequer	San Joaquin River Inflow to Millerton	San Joaquin River near Vernalis (b)	Kings River Inflow to Pine Flat	Kaweah River Inflow to Terminus	Tule River Inflow to Success	Kern River Inflow to Isabella
Average Annual Runoff (a)	1085	1789	920	1659	5452	1568	404	133	629
1930-31	29	34	29	29	30	30	28	19	24
1931-32	125	118	121	123	121	133	129	104	111
1932-33	56	63	56	67	62	75	70	60	68
1933-34	39	45	39	42	42	42	32	15	37
1934-35	112	118	127	116	118	103	89	67	72
1935-36	122	121	125	112	119	120	121	128	119
1936-37	102	112	132	133	120	149	168	230	176
1937-38	188	192	226	222	206	209	216	267	205
1938-39	48	55	52	56	53	62	61	62	72
1939-40	129	124	119	113	121	114	127	158	111
1940-41	123	140	158	160	146	162	159	177	198
1941-42	137	133	140	136	136	128	122	102	119
1942-43	144	133	140	124	134	129	166	274	159
1943-44	62	73	74	76	72	75	78	77	92
1944-45	118	117	119	129	121	132	136	153	128
1945-46	109	105	102	104	105	103	88	71	103
1946-47	58	62	61	68	63	71	66	39	68
1947-48	83	79	75	73	77	64	65	48	53
1948-49	69	70	69	70	70	61	54	37	47
1949-50	99	87	78	79	85	82	75	47	69
1950-51	156	139	133	112	133	102	104	116	84
1951-52	177	167	170	171	171	182	204	241	221
1952-53	89	86	68	74	80	74	76	74	86
1953-54	82	81	73	79	79	83	76	67	80
1954-55	63	64	58	70	64	71	68	49	56
1955-56	174	177	182	178	178	162	180	157	139
1956-57	82	80	70	80	79	79	73	49	69
1957-58	155	148	153	159	153	157	159	168	167
1958-59	54	56	50	57	55	52	38	24	43
1959-60	55	59	52	50	54	45	45	36	44
1960-61	37	41	34	39	39	36	29	15	28
1961-62	92	99	101	116	103	118	98	65	104
1962-63	117	115	107	117	115	119	124	89	117
1963-64	60	64	49	56	58	54	57	45	50
1964-65	164	154	145	137	149	123	121	102	109
1965-66	65	73	73	78	73	77	61	35	64
1966-67	178	174	187	195	182	207	254	281	251
1967-68	59	57	46	52	54	51	54	48	73
1968-69	203	207	240	244	223	271	314	375	351
1969-70	122	108	95	87	102	82	88	91	94
1970-71	98	92	79	85	89	74	73	62	66
1971-72	71	64	63	66	66	54	42	26	39
1972-73	112	115	122	123	118	133	152	169	141
1973-74	144	122	126	132	130	131	121	115	122
1974-75 (c)	114	111	123	108	113	99	95	91	86

(a) Average unimpaired runoff in thousands of acre-feet computed from the 50-year period October 1920 through September 1970.

(b) Figures were computed from summations of unimpaired runoff at foothill stations on major tributaries only and do not include runoff from minor tributaries and from valley floor.

(c) Percent figures are preliminary values and subject to revision.

TABLE B-2

MONTHLY UNIMPAIRED RUNOFF
(a)

In percent of average

Month		Stanislaus River Inflow to Melones	Tuolumne River Inflow to Don Pedro	Merced River Inflow to Exchequer	San Joaquin River Inflow to Millerton	San Joaquin River near Vernalis (b)	Kings River Inflow to Pine Flat	Kaweah River Inflow to Terminus	Tule River Inflow to Success	Kern River Inflow to Isabella
October	Percent	98	71	29	117	85	100	105	213	133
	Average	8	14	6	16	45	16	4	1	14
November	Percent	58	36	47	58	48	66	81	90	100
	Average	24	45	20	30	119	28	8	4	17
December	Percent	44	39	36	52	43	50	38	46	71
	Average	52	92	46	62	253	54	21	11	28
January	Percent	27	48	44	53	44	48	39	39	72
	Average	67	108	56	69	300	59	22	14	28
February	Percent	81	104	139	80	100	68	50	65	76
	Average	85	140	80	95	400	80	30	19	32
March	Percent	130	133	145	106	127	96	92	82	75
	Average	112	168	90	128	500	106	38	24	49
April	Percent	62	63	67	56	61	45	50	70	49
	Average	196	282	148	236	863	214	64	24	86
May	Percent	139	129	132	127	131	122	119	140	98
	Average	290	446	242	430	1408	429	105	22	145
June	Percent	185	169	195	156	171	141	152	150	109
	Average	179	352	168	369	1069	370	76	10	125
July	Percent	147	126	144	102	121	84	91	157	77
	Average	52	113	48	158	370	150	26	3	63
August	Percent	145	71	159	88	101	75	70	267	81
	Average	13	20	10	46	89	44	7	1	26
September	Percent	192	67	276	142	149	92	128	0	102
	Average	6	8	4	18	36	17	3	0	15
1974-75 Water Year Average	Percent	114	111	123	108	113	99	95	91	86
	Water Year Average	1085	1789	920	1659	5452	1568	404	133	629

(a) Percent figures are preliminary values and subject to revision. Average unimpaired runoff in thousands of acre-feet computed from the 50-year period October 1920 through September 1970.

(b) Figures were computed from summations of unimpaired runoff at foothill stations on major tributaries only and do not include runoff from minor tributaries and from the valley floor.

DAILY MEAN DISCHARGE

The streamflow data shown in Table B-3 are arranged, for each stream or stream system, in downstream order. Stations on a tributary entering between two main stem stations are listed between those stations, and in downstream order on that tributary. A stream gaging station is named after the stream and the nearest post office (Merced River at Cressey) or well-known landmark (San Joaquin River at Fremont Ford Bridge).

The discharges estimated for periods of no record or invalid record, are shown with the letter "E". Also, qualified by the letter "E" are discharges obtained from extended ratings which exceed 140 percent of the highest measured flow-rate on which the rating curve was based.

The discharge figures in this table have been rounded off as follows:

1. Daily flows - second-feet

0.0	- 9.9	nearest	Tenth
10	- 999	"	Unit
1,000	- 9,999	"	Ten
10,000	- 99,999	"	Hundred
100,000	- 999,999	"	Thousand

2. Monthly means - second-feet

0.0	- 99.9	nearest	Tenth
100	- 9,999	"	Unit
10,000	- 99,999	"	Ten
100,000	- 999,999	"	Hundred

3. Monthly and yearly totals - acre-feet

0.0	- 9,999	nearest	Unit
10,000	- 99,999	"	Ten
100,000	- 999,999	"	Hundred
1,000,000	- 9,999,999	"	Thousand

Those streamflow data received from cooperating agencies are published as received and do not necessarily adhere to the above criteria.

TABLE B-3

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

	WATER YEAR	STATION NO.	STATION NAME
	1975	B07885	SAN JOAQUIN RIVER BELOW FRIANT

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	95 *	70	39	38	41	38	44	112	100	125	144	88	1
2	90	70	39	36	46	38	44	115	100	123	129	88	2
3	85	70	42	36	41	38	46	113	102	123	129	88	3
4	75	66	42	38	38	38	46	113	106	121	127	88	4
5	76	60	41	38	42	39	57	112	106 *	123	127 *	88	5
6	76	60	38	39	46	52	73	110	123	125	125	88	6
7	76	60	39	39	62	41	55	108	123	123	123	87	7
8	76	50	41	44	62	41	50	110	121	121	123	87	8
9	75	30	.39	41	62	39	47	110	125	123	123	87	9
10	75	28	39	39	78	41	44	110	119	119	121	87	10
11	73	28	39	39	65	52	44	110	117	112	119	83	11
12	73	28	39	38	63	46	42	108	121	112	119	82	12
13	73	28	41	38	65	47	39	110	121	110	119	82	13
14	73	30	41	38	63	65	39	112	123	110	112	82	14
15	71	32	41	38	47	46	44	112	121	110	100	75	15
16	71	33	41	38	41	49	42	112	115	110	99	70	16
17	70	33	41	38	38	49	42	115	117	110	99	70	17
18	70	32	38	39	36	42	41	115	119	108	99	71	18
19	70	32	38	39	38	42	42	112	121	110	99	71	19
20	71	32	39	38	39	41	36	112	119	110	99	71	20
21	71	34	38	38	39	42	41	110	121	108	97	71	21
22	73	36	38	38	100	33	102	121	110	95	71	22	
23	76 *	34	38	38	66	77	100	121	108	90	71	23	
24	78	34	38	38	54	136	100	123	121	92	70	24	
25	78	34	38	38	41	66	136	99	123	142	94	70	25
26	80	36 *	39	39	41 *	68	100	95	123	142	94	68	26
27	80	36	39	39	41	57	76	95	125	151	94	73	27
28	83	36	39	38	41	54	75	97	125	163	94	82	28
29	82	38	38	39	50	90	97	125	163	94	82	29	
30	82	38	38 *	39	49	110 *	97	125 *	160	94	82 *	20	
31	76		38	39 *	47 *		99		160	90		31	
MEAN	76.5	40.9	39.3	38.6	47.5	49.6	59.7	107	118	124	108	79.1	MEAN
MAX	95	70	42	44	78	100	136	115	125	163	144	88	MAX
MIN	70	28	38	36	36	38	33	95	100	108	90	68	MIN
AC. FT.	4710	2440	2420	2370	2640	3050	3550	6590	7040	7650	6670	4710	AC. FT.

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *

MEAN DISCHARGE 74.4	DISCHARGE 163	M A X I M U M	DISCHARGE 28	GAGE HT. 11	MINIMUM	DISCHARGE 28	GAGE HT. 11	MO 7	DAY 28	TIME Mean Daily	DISCHARGE 28	GAGE HT. 11	MO 11	DAY 10	TIME Mean Daily	TOTAL ACRE FEET 53830
---------------------------	------------------	---------------	-----------------	----------------	---------	-----------------	----------------	---------	-----------	-----------------------	-----------------	----------------	----------	-----------	-----------------------	-----------------------------

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
36 59 04	119 43 24	SW 7 11S 21E	77,000	23.8	12-11-37	OCT 07-DATE			1938	294.00	USGS
			12,400a	11.69	6-6-69						

Station located 2 miles downstream from Friant Dam and 1.5 miles downstream from Cottonwood Creek. Flow regulated by Millerton Lake beginning in 1944, and by other upstream reservoirs. Records furnished by U. S. Geological Survey. Drainage area is 1.675 square miles.

a Maximum flows since construction of Friant Dam in 1944.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	C00200	JAMES BYPASS NEAR SAN JOAQUIN

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
MEAN													MEAN
MAX.													MAX.
MIN.													MIN.
AC. FT.													AC. FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN
DISCHARGEM A X I M U M
DISCHARGE GAGE HT MO DAY TIMEM I N I M U M
DISCHARGE GAGE HT MO DAY TIMETOTAL
ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC T & R M.D.B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO OH GAGE	REF DATUM
			CFS	GAGE NT.	DATE			FROM	TO		
36 39 06	120 10 45	SW 1 15S 16E	5600	12,22	6-7-69	APRIL 29-DATE					

Station located 0.1 mile downstream from Placer Avenue, 0.1 miles north of City of San Joaquin. James Bypass carries diverted flow from Kings River to San Joaquin River. Flow regulated by upstream reservoir, weir, and diversion. Altitude of gage is 165 feet (from U. S. Geological Survey topographic map). This station was established in 1929 and maintained until 1947 by Kings River Water Association. The U. S. Geological Survey maintained it and published the data until 1953. The U. S. Bureau of Reclamation has maintained the station from that time and records for the period 1953 through 1975 are available from their office in Sacramento. Records since 1969 have been published in the Bulletin No. 130 series of reports.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

	WATER YEAR	STATION NO.	STATION NAME
	1975	B95925	DELTA-MENDOTA CANAL NEAR TRACY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	4331		0	0	4497	4787	4161	4722	3318	4633	4588	4436	1
2	4450		0	0	4527	4777	4792	4717	3687	4644	4578	4040	2
3	4345		0	0	4506	4782	4752	4727	4046	4633	4568	3944	3
4	4344		0	0	4361	4750	4735	4705	4056	4635	4540	3970	4
5	4333		0	0	4485	4772	4751	4699	4083	4649	4583	3965	5
6	4357		0	0	4496	4764	4716	4704	4082	4678	4572	3968	6
7	4363		0	1071	4486	4772	4718	4628	4073	4634	4571	3968	7
8	4360		0	1684	4375	4111	4738	4759	4072	4638	4193	3979	8
9	4371		0	2309	4474	4116	4739	4764	4052	4670	4593	3965	9
10	4352		0	2723	4509	4113	4317	4764	4045	4639	4583	3978	10
11	4353		0	2637	4673	4116	3860	4739	4023	4641	4578	3974	11
12	4351		0	3202	4714	4086	3735	4757	4053	4637	4615	3975	12
13	4348	N	0	3209	4743	4127	3714	4288	4034	4635	4624	3974	13
14	4363	O	0	3236	4254	3681	3535	4140	4042	4641	4606	3958	14
15	4372		0	3192	3936	2825	3238	3582	4060	4633	4589	3979	15
16	4298	F	0	3252	3941	2461	3230	3387	4006	4626	4600	3981	16
17	3921	L	0	3400	3934	2452	3229	3356	4032	4632	4536	3971	17
18	3860	O	0	3486	3934	2455	3226	3367	4016	4594	4492	3967	18
19	3755	W	92	3486	3930	2946	3224	3372	4043	4583	4352	3861	19
20	3872		224	3475	3959	3377	3219	3367	4033	4533	4380	3760	20
21	3872		0	3482	3951	3372	3466	3338	3963	4524	4371	3748	21
22	3403		0	3483	3918	3372	4445	3377	3917	4529	4385	3755	22
23	2701		0	3509	3931	3887	4737	3375	3938	4581	4376	3764	23
24	2437		0	3492	3422	3364	4734	3336	4009	4602	4347	3730	24
25	2471		0	3952	3228	3398	4745	3360	3947	4562	4377	2810	25
26	1865		0	3948	3299	3383	4734	3346	4010	4613	4404	2394	26
27	1664		0	3943	4209	3383	4728	3365	3992	4618	4415	2397	27
28	1676		0	3944	4588	3732	4720	3371	4001	4602	4409	2302	28
29	1080		0	4129		3413	4727	3342	4005	4592	4422	2295	29
30	243		0	4489		4043	4729	3343	4245	4588	4487	2313	30
31	0		0	4568		4092		3333		4568		4458	
MEAN.	3435		10	2687	4195	3760	4213	3949	3996	4612	4490	3637	MEAN.
MAX.	4450		224	4568	4743	4787	4792	4764	4245	4678	4624	4436	MAX.
MIN.	0		0	3228	2452	3219	3219	3333	3318	4524	4193	2295	MIN.
AC. FT.	211640		627	165228	232300	231177	250702	242842	237788	283595	276087	216442	AC. FT.

E = ESTIMATED
 NR = NO RECORD
 * = DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW

= E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE			MINIMUM DISCHARGE			TOTAL ACRE FT				
3244	DISCHARGE	GAGE HT	MO	DAY	TIME Daily Mean	DISCHARGE	GAGE HT	MO	DAY	TIME Daily Mean	ACRE FT

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 47 49	121 35 03	SW31 1S 4E	4935		8-11-69	JUN 51-DATE		1951		0.00	USGS

Station located at Tracy Pumping Plant at intake to canal, 6 miles southeast of Byron, 10 miles northwest of Tracy. Discharge computed from records of operation of pumps. Water is diverted from Sacramento-San Joaquin Delta by way of Old River and a dredged channel to the Tracy Pumping Plant where it is lifted about 200 feet into canal. Records furnished by U. S. Bureau of Reclamation.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B00770	DELTA-MENDOTA CANAL TO MENDOTA POOL

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	1809	531		0	1045	1263	1500	1991	230	2583	2875	1806	1
2	1794	507		0	1052	122	1638	2050	2460	2764	2826	1743	2
3	1778	475		0	1003	1434	1755	2086	2545	2730	2813	1679	3
4	1741	520		0	831	1646	1987	2086	2660	2615	2795	1672	4
5	1733	553		0	817	1579	2010	2079	2664	2574	2916	1710	5
6	1706	554		0	793	1245	2010	2053	2732	2439	2882	1832	6
7	1701	583		0	726	929	1674	2119	2748	2428	2883	1863	7
8	1578	567		0	686	887	1537	2192	2763	2620	2960	1687	8
9	1537	541		0	675	905	1456	2244	2789	2747	2978	1587	9
10	1542	516		1000	695	914	1451	2256	2907	2848	2994	1508	10
11	1561	462		1000	833	938	1493	2256	2880	2845	3033	1524	11
12	1561	445		1000	931	951	1493	2171	2798	2861	2949	1560	12
13	1560	455	N	549	827	930	1493	2201	2748	2876	2831	1451	13
14	1530	420	O	585	829	703	1489	2291	2704	2838	2898	1438	14
15	1326	225		515	688	552	1375	2435	2749	2820	2811	1441	15
16	1318	175	F	460	556	551	1369	2257	2789	2856	2751	1530	16
17	1278	150	L	456	525	561	1401	2234	2896	2847	2690	1619	17
18	1122	135	O	456	520	753	1367	2234	2875	2705	2530	1706	18
19	1190	100	W	508	664	796	1398	2237	2853	2659	2429	1645	19
20	1190	50		636	769	968	1399	2246	2711	2614	2329	1706	20
21	998	50		731	793	902	1557	1988	2629	2656	2398	1721	21
22	728	75		858	844	875	1660	1965	2629	2569	2400	1784	22
23	660	75		853	833	875	1792	1971	2616	2714	2425	1795	23
24	818	75		843	833	861	1896	2071	2450	2934	2425	1924	24
25	847	75		866	914	944	1979	2105	2482	2917	2409	1966	25
26	652	50		884	1235	912	2040	2137	2472	2917	2375	1918	26
27	651	50		915	1362	1035	2053	2279	2489	2938	2329	1896	27
28	795	25		961	1267	1023	1859	2305	2489	2992	2226	1895	28
29	655	0		1024		1048	1736	2258	2490	3020	2132	1922	29
30	698	0		1032		1075	1850	2233	2551	2877	2067	1915	30
31	595	0		971		1408		2248		2932	2002		21
MEAN MAX.	1809	583		1032	1362	1646	2053	2435	2907	3020	3033	1966	MEAN MAX.
MIN.	595	0		0	520	551	1367	1965	2307	2428	2002	1438	MIN.
AC. FT.	77728	16778		33924	46654	61003	98614	133446	158444	170055	161380	102037	AC. FT.

MEAN DISCHARGE	DISCHARGE	MAXIMUM DISCHARGE				DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	TOTAL ACRE FEET
		OF RECORD														1060063

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	I 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	ZERO ON GAGE	REF DATUM	
			CFS	GAGE HT	DATE						
36 47 11	120 23 05	NW19 13S 15E				JUL 51-DATE					

Station located approximately 2 miles north of Mendota, where Delta-Mendota Canal crosses the Outside Canal, which is 0.8 mile northwest of Bass Avenue crossing (check No. 21). Flow measured by three Sparling meters located at siphon outlet. Records furnished by U. S. Bureau of Reclamation.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B07710	SAN JOAQUIN RIVER NEAR MENDOTA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	256	145	59	0	48	247	272	249	403	490	470	325	1
2	254	145	52	0	46	249	271	265	414	492	481	322	2
3	254	143	48	0	36	249	270	286	441	490	490	310	3
4	238	141	45	0	27	264	258	291	444	487	495	299	4
5	223	141	39	0	23	270	240	315	447	495	491	296	5
6	223	141	32	0	21	223	238	345	470	495	504	291	6
7	190	138	27	0	20	206	234	356	492	495	513	296	7
8	159	136	23	0	19	182	213	369	487	490	510	298	8
9	150	136	20	0	20	180	204	377	476	476	507	288	9
10	141	136	17	0	19	178	184	387	461	476	507	286	10
11	139	136	16	1	16	178	184	398	458	473	513	279	11
12	139	134	0	5	20	180	184	400	461	473	519	281	12
13	139	134	0	9	23	176	184	395	458	476	519	284	13
14	136	132	0	16	23	143	186	374	490	478	516	284	14
15	146	131	0	23	23	119	182	371	516	478	516	291	15
16	155	127	0	25	24	110	170	371	510	481	510	308	16
17	155	122	0	26	24	122	167	356	501	481	507	315	17
18	154	119	0	26	26	154	167	340	484	481	501	328	18
19	154	114	0	25	27	198	168	343	487	484	478	330	19
20	154	111	0	23	27	238	167	345	498	501	476	330	20
21	157	106	0	23	73	254	176	356	498	516	470	330	21
22	167	105	0	22	141	270	204	361	501	519	461	330	22
23	170	118	0	20	146	272	238	379	507	510	447	330	23
24	170	134	0	19	174	261	240	387	498	510	450	335	24
25	168	129	0	19	213	242	242	390	495	507	456	361	25
26	168	124	0	19	230	258	245	384	495	501	444	366	26
27	167	119	0	54	234	263	245	382	495	504	406	377	27
28	150	113	0	82	245	249	256	365	495	498	366	377	28
29	121	98	0	72	256	256	377	492	473	330	377	29	29
30	118	75	0	64	272	252	384	492	461	330	364	30	30
31	129	0	53	274				398	464	328		31	
MEAN MAX. MIN. AC. FT.	256 145 118 10400	145 75 7500	59 0 1240	82 0 3900	245 16 3900	274 110 13370	272 167 12890	400 249 22010	516 403 28500	519 461 30060	519 461 30060	519 328 28780	377 279 19020

E = ESTIMATED
 NR = NO RECORD
 * = DISCHARGE MEASUREMENT Q8
 OBSERVATION OF NO FLOW
 # = E AND *

MEAN DISCHARGE 246	MAXIMUM DISCHARGE 519	MAXIMUM GAGE HT. 4.31	MO	DAY	TIME	DISCHARGE 0	MINIMUM GAGE HT. 12	MO	DAY	TIME	TOTAL ACRE FEET 178420
--------------------------	-----------------------------	-----------------------------	----	-----	------	----------------	---------------------------	----	-----	------	------------------------------

LOCATION			MAXIMUM DISCHARGE				PERIOD OF RECORD				DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B.&M.	OF RECORD				DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM	
			CFS	GAGE HT.	DATE	FROM			TO				
36 48 37	120 22 35	SW 7 13S 15E	11740a 8840	13.75 6- 1-52	6-20-41 OCT 39-DATE				1939 1954	1953 140.53	142.53 140.53	USBR USBR	

Station located 2.5 miles downstream from Mendota Dam, 4 miles north of Mendota. Records furnished by U. S. Bureau of Reclamation. Drainage area is 3,943 square miles. This station is equipped with DWR radio telemeter. Flow regulated by upstream reservoirs. Summer flows consist mainly of Delta-Mendota Canal water regulated through Mendota Dam for downstream diversions.

a Maximum discharge of record prior to the construction of Friant Dam in 1944.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B07610	SAN JOAQUIN RIVER NEAR DOS PALOS

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	55	5	146	0	12	12	12	0	7	12	12	12	1
2	46	4	99	0	12	12	8	0	7	8	12	12	2
2	42	3	68	0	4	7	0	0	12	9	12	12	3
4	38	3	50	0	0	0	0	0	12	12	8	12	4
5	34	4	23	0	0	9	0	0	12	12	9	12	5
6	30	3	5	0	0	9	0	0	12	6	12	12	6
7	27	2	0	4	0	0	0	0	12	4	12	12	7
8	24	2	0	21	0	0	0	0	12	12	12	12	8
9	19	0	0	28	0	0	0	0	12	12	12	12	9
10	16	0	0	198	0	0	0	3	7	12	12	5	10
11	12	0	0	218	0	0	0	0	0	8	12	0	11
12	8	0	0	116	0	0	0	0	9	0	12	0	12
13	6	0	0	98	0	0	0	12	12	9	12	0	13
14	5	0	0	152	0	0	8	3	12	12	12	0	14
15	5	0	0	285	0	0	12	0	12	7	12	0	15
16	5	0	0	235	0	0	4	7	12	0	12	0	16
17	8	0	0	238	0	0	0	0	12	9	12	0	17
18	8	0	0	242	0	0	0	0	12	12	12	0	18
19	8	0	0	242	0	0	0	0	12	12	12	0	19
20	8	0	0	242	5	0	0	0	12	7	12	0	20
21	8	0	12	255	12	0	0	0	12	9	12	0	21
22	9	0	13	260	3	0	9	0	12	12	12	0	22
23	9	0	22	277	0	0	8	0	12	12	12	0	23
24	11	0	14	288	0	0	0	9	12	12	12	0	24
25	11	47	1	290	5	0	0	8	12	12	12	0	25
26	11	180	0	282	12	0	0	0	12	12	12	0	26
27	11	210	0	217	12	0	0	7	12	12	12	0	27
28	14	205	0	8	12	0	0	12	12	12	12	0	28
29	12	198	0	12	0	0	0	12	12	12	12	0	29
30	6	178	0	12	0	0	0	12	12	12	12	0	30
31	4	0	0	12	8			12	12	12	12	0	31
MEAN MAX MIN. AC. FT.	55 4 0 1010	210 0 900 2070	146 0 0 8390	290 0 0 177	12 0 0 113	12 0 0 121	12 0 0 228	12 0 0 650	12 0 0 600	12 8 0 700	12 0 0 700	12 0 0 224	MEAN MAX. MIN. AC. FT.

E — ESTIMATED

NE — NO RECORD

* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	MAXIMUM				MINIMUM					
21.0	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME

TOTAL ACRE FEET
15183

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M.D.B.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO OH GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TD		
36 59 38	120 30 02	N 1/2 11S 13E	8920a	10.52b	6-24-41					1944	116.5 USED
Station located 800 feet downstream from the head of Temple Slough, 6.5 miles east of Dos Palos. Records furnished by U. S. Bureau of Reclamation. Drainage area is approximately 4,672 square miles. Flow regulated by upstream reservoirs. Water diverted above station to Central California Irrigation District.											

a Maximum discharge of record prior to the construction of Friant Dam in 1944.

b Gage height at site and datum then in use.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	2.1 *	17	13	27	24	62	79	118	119	57	16	6.3	1
2	3.4	14	13	25	46	60	73	122	117 *	59	7.5	6.2	2
3	7.0	11	65	15	32	58	74 *	138	146	67	6.8	5.2	3
4	4.5	11	126 *	15	37	57 *	71	151	143	65	6.7	5.0	4
5	4.4	10	50	17	31 *	98	81	120	143	63	6.8	4.7	5
6	3.8	10	33	50	32	143	76	108 *	125	60	6.7	3.8	6
7	4.2	11	28	49	36	71	107	139	56	8.2	3.6	7	
8	5.2	13 *	25	77	39	150	72	121	137	52	6.0	4.1	8
9	4.9	12	23	45 *	193	117	72	135	138	50	7.5	4.7	9
10	4.6	12	21	34	143	100	79	142	136	49	5.1	5.1	10
11	4.6	11	21	30	80	90	77	145	128	47	6.9	5.1	11
12	4.1	11	21	28	61	85	76	149	118	44	6.8	4.5	12
13	3.8	12	20	27	98	81	81	150	116	42	6.9	4.5	13
14	3.6	11	19	27	85 *	74	104	150	116	41	6.8	4.5	14
15	3.7	11	19	26	59	72	108	153	114	38	6.8	4.4	15
16	3.6	12	20	25	52	80	93	167	114	31	6.8	4.3	16
17	4.3	13	19	24	45	67	84	168	113	30	7.5	4.8	17
18	4.3	13	18	24	43	64	79	169	113	29	8.2	4.4	18
19	2.8	13	18	25	43	67	77	166	111	28	10	3.0	19
20	3.0	13	18	24	56	67	80	157	108	26	11	3.0	20
21	3.2	21	18	24	46	69	95	140	101	25	11	3.0	21
22	3.3	28	18	24	41	87	100	136	87	24	6.4	2.8	22
23	3.7	16	13	23	40	72	99	136	84	23	5.1	2.5	23
24	4.0	14	20	23	41	75	115	141	83	22	5.2	2.8	24
25	4.3	14	27	23	42	335	178	144	81	21	5.4	2.9	25
26	5.1	13	23	23	45	159	113	138	80	20	5.4	2.9	26
27	4.7	13	17	22	49	110	101	136	79	19	5.5	2.8	27
28	43	12	21	17	55	90	103	132	65	18	5.4	3.0	28
29	18	12	18	21		82	108	124	61	18	6.1	3.3	29
30	11	13	16	20		82	113	120	58 *	19	6.1	3.3	30
31	14		17	18		88		116	18	5.9			21
MEAN	6.3	13.2	25.9	27.5	56.9	96.3	91.1	139	109	37.5	7.2	4.0	MEAN
MAX	43	28	128	77	193	335	178	169	146	67	16	6.3	MAX
MIN	2.1	10	13	15	24	57	71	107	58	18	5.1	2.5	MIN
AC. FT.	390	787	1591	1690	3162	5919	5419	8527	6492	2303	445	239	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
— E AND *

MEAN	MAXIMUM				MINIMUM				TOTAL
DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	ACRE FEET
51.1	572	2.84	3	1000	1.6	0.90	10	1	1645

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T & R M.D.B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 20 44	119 38 20	SD 2 7S 21E	2000	5.00	2-1-63	I SEP 61-DATE		1961		0.00	LOCAL
Station located 1.6 miles north of Oakhurst on Highway 41, 500 feet downstream from White Oaks Guest Home. Station located on left bank above concrete weir. Drainage area is 32.5 square miles. Altitude of gage is approximately 2,300 feet, from topographic map. Flow recorded at this station includes water diverted from South Fork Merced River drainage via Big Creek Diversion.											

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY	
1	0.9 *	4.3	2.2	2.7	7.0 E	12 E	18	23	14	5.7	3.6	2.4	1	
2	1.2	3.2	2.2	2.7	15	10 E	17	23	13 *	5.7	3.7	2.3	2	
3	1.6	2.7	1.6	2.8	11	E	11 E	17 *	25	13	5.6	3.6	2.2	3
4	1.5	2.4	2.5	3.0	15	E	12 #	16	28	12	5.5	3.4	2.1	4
5	1.4	2.3	8.9	3.0	11	E	23	17	23	11	5.4	3.4	2.0 *	5
6	1.3	2.3	5.5	7.9	10	E	46	16	21 *	10 *	5.6	3.3	1.9	6
7	1.2	2.2	4.4	9.3	12	E	40	15	21	10	5.8	3.3	1.9	7
8	1.3	2.3 *	3.8	17	15	E	41	14	24	9.6	5.6	3.2 *	1.8	8
9	1.4	2.4	3.5	8.2	65	E	30	15	26	9.3	5.4	3.0	2.2	9
10	1.4	2.3	3.2	6.7	55	E	25	16	27	8.9	5.4	2.8	2.2	10
11	1.4	2.2	3.1	5.8	14	E	22	17	28	8.6	5.2	2.8	2.2	11
12	1.3	2.0	3.1	5.2	6.0	0	21	18	29	8.3	5.0	2.6	2.1	12
13	1.2	1.9	3.0 *	5.0	24	E	20	20	30	8.1	4.9	2.7	1.9	13
14	1.2	1.8	2.9	4.8 E	26	E	18	23	30	8.6	4.9	2.7	1.8	14
15	1.1	1.9	2.8	4.6 E	9.0 E		17	22	30	7.6	4.8	2.7	1.7	15
16	1.1	1.8	2.8	4.4 E	6.0 E	E	19	19	29	7.3	4.7	2.7	1.6	16
17	1.0	1.8	2.7	4.3 E	5.0 E		16	18	28	7.6	4.8	2.6	1.7	17
18	1.0	1.9	2.7	4.3 E	4.0 E		16	17	28	7.8	4.8	2.6	1.7	18
19	1.0	1.9	2.6	4.4 E	4.0 E		17	17	28	7.9	4.6	3.4	1.6	19
20	1.0	2.0	2.6	4.3 E	7.0 E		17	19	26	7.9	4.5	3.8	1.5	20
21	1.0	3.3	2.6	4.3 E	5.0 E		17	21	22	7.7	4.5	4.5	1.5	21
22	1.0	10	2.7	4.3 E	4.0 E		19	21	20	7.3	4.3	3.6	1.4	22
23	1.1	4.1	2.6	4.3 E	5.0 E		17	21	20	7.0	4.1	3.1	1.4	23
24	1.1	3.2	2.6	4.3 E	8.0 E		19 *	23	28	7.1	3.9	2.8	1.4	24
25	1.2	2.8	2.5	4.3 E	11. E		118	34	32	7.4	3.8	2.7	1.4	25
26	1.2	2.6	2.6	4.5 E	14 E		43	24	19	6.9	3.8	2.5	1.3	26
27	1.4	2.4	2.6	4.3 E	15 E		30	21	18	6.7	3.8	2.5	1.3	27
28	9.5	2.3	3.5	4.0 E	15 E		24	21	17	6.4	3.6	2.5	1.3	28
29	4.7	2.3	3.0	3.8 E	20		22	16	16	6.2	3.6	2.5	1.3	29
30	3.0	2.2	2.9	3.7 E	19		23	15	15	6.0 *	3.7	2.5	1.2	30
31	3.5		2.6	3.6 E	20			15			3.7	2.9		31
MEAN	1.7	2.7	4.3	5.0 E	14 E		25.1	19.4	24.2	8.6	4.7	3.0	1.7	MEAN
MAX	9.5	10	25	17	65		118	34	32	14	5.8	4.5	2.4	MAX
MIN	0.9	1.8	2.2	2.7	4.0 E		10 E	14	15	6.0	3.6	2.5	1.2	MIN
AC.FT.	106	160	264	309 E	789	E	1545	1154	1486	514	291	187	104	AC FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	DISCHARGE	M A X I M U M	DISCHARGE	GAGE HT	M O.	D A Y	T I M E	DISCHARGE	GAGE HEIGHT ONLY	M I N I M U M	DISCHARGE	GAGE HT	M O.	D A Y	T I M E	TOTAL ACRE FEET
9.5	220	5.56	3	25	0900			0.5	2.49	10	2	1445				6909

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE					
LATITUDE	LONGITUDE	I 4 SEC T & R M D 8 A.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD			ZERO ON GAGE	REF DATUM		
			CFS	GAGE HT	DATE			FROM	TO	REF				
37 23 38	119 39 10	SE22 6S 21E	804	9.08	2-1-63	DEC 59-DATE		1959			0.00		LOCAL	

Station located 150 feet downstream from bridge, 4.5 miles north of Oakhurst. Tributary to Fresno River. Stage-discharge relationship at times affected by ice. Drainage area is 10.6 square miles. Recorder installed December 15, 1959. Altitude of gage is approximately 3,500 feet (from topographic map).

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B67285	MIAMI CREEK AT HIGHWAY 49 NEAR AHHAWNEE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.0	1.4	8.0	8.9	14	14	41	39	18	3.6	0.8	0.3	1
2	0.0	1.2	8.7	9.5	31	12	34	38	18 *	3.4	0.8	0.3	2
3	0.0	1.0	23	9.6	22	13	34 *	44	17	2.6	1.0	0.4	3
4	0.0	1.2	40 *	10	31	17 *	34	62	16	2.3	1.0	0.3	4
5	0.0	1.5	15	9.8	23 *	50	80	43	14	1.1	0.7	0.2 *	5
6	0.0	1.6	7.8	19	21	186	92	38 *	13	0.7	0.9	0.2	6
7	0.0	2.0	5.6	22	23	175	56	35	13	1.2	0.6	0.2	7
8	0.0	2.0 *	5.6	35	30	194	48	37	13	1.4	0.5 *	0.4	8
9	0.1	2.4	5.9	21 *	146	111	42	40	13	1.7	0.2	0.3	9
10	0.1	2.2	5.3	12	109	87	43	41	13	2.3	0.2	0.2	10
11	0.0	2.4	4.8	9.8	28	72	41	42	11 *	2.0	0.5	0.3	11
12	0.0	2.4 *	4.2	8.2	12	73	40	43	8.7	1.9	0.9	0.4	12
13	0.0	2.2	3.9 *	7.6	48	66	43	43	7.4	1.7	0.9	0.5	13
14	0.0	2.7	3.8	7.3 *	52 *	63	80 *	43 *	6.1	1.9	0.9	0.5	14
15	0.0	2.8	4.2	7.2	17	46	101	43	6.5	1.7 *	1.0	0.4	15
16	0.1	2.9	4.4	7.2	11	68	72	42	6.6	1.9	1.0	0.3	16
17	0.6	2.9	4.9	7.8	7.0	45 *	57	41	8.0	1.6	1.1	0.3	17
18	0.1	2.5	5.2	8.0	5.9	36	49	39	5.7	1.3	1.2	0.3 *	18
19	0.1	2.4	5.4	7.9	6.1	36	45	39	5.7	1.3	1.6	0.3	19
20	0.1	2.4	5.5	8.2	15	34	44	38	5.3	1.3	1.7	0.2	20
21	0.0	3.2 *	5.9	8.2	8.0	39	45	31	5.5	1.6 *	1.8 *	0.2	21
22	0.1	6.2	6.3	8.2	6.2	126	43	29	4.9	1.3	1.4	0.3	22
23	0.2	3.2	6.3	8.3	10	53	39	30	6.5 *	1.0	0.7	0.3	23
24	0.2	3.1	6.3	9.0	16 *	50	42	29	6.5	0.9	0.6	0.3	24
25	0.3	3.5	6.6	9.1	22	339 *	93	29	6.7	1.1	0.6	0.1	25
26	0.4	4.3	6.9	8.9	28	247	55	28	6.6	1.2	0.6	0.1	26
27	0.7	4.7	6.9	9.2	30	117	42	26	8.0	1.1	0.4	0.1	27
28	4.5	5.3	10	9.3	31	77	40	25	9.2	0.9	0.4	0.1	28
29	0.8	6.3	8.9	9.3		59	40	23	9.4	0.8	0.4	0.0	29
30	0.1	7.5	9.0	9.3		51	40	21	6.1 *	0.6	0.4	0.0	30
31	1.0	8.7	9.3			49		20		0.7	0.3		31
MEAN	0.3	3.0	8.2	10.8	28.7	84.0	51.8	36.2	9.6	1.6	0.8	0.3	MEAN
MAX.	4.5	7.5	40	35	146	339	101	62	18	3.6	1.8	0.5	MAX.
MIN.	0.0	1.0	3.8	7.2	5.9	12	34	20	4.9	0.6	0.2	0.0	MIN.
AC.FT.	19	177	502	663	1593	5167	3084	2223	572	95	50	15	AC.FT.

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *

MEAN DISCHARGE 19.6	MAXIMUM DISCHARGE 477	GAGE HT. 7.28	MO.	DAY 3	TIME 25	DISCHARGE 0.0	GAGE HT. 2.32	MO.	DAY 10	TIME 0000	TOTAL ACRE FEET 14160
---------------------------	-----------------------------	------------------	-----	----------	------------	------------------	------------------	-----	-----------	--------------	-----------------------------

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1' SEC T & R M.D.B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 20 50	119 43 00	SW 6 TS 21E	913E	8.24	1-16-70	OCT 69-DATE		1969		0.00	LOCAL

Station located 4.0 miles west of Oakhurst on State Highway 49. Recorder installed on the downstream side of bridge. Tributary to Fresno River. Drainage area 31.6 square miles. Recorder installed 10-15-69. Altitude of gage is approximately 2030 feet (from topographic map).

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B06725	FPESMO - LIVINGSTON RIVER MILE 10.0 MADERA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1			0.0	0.0	0.0	0.0	45	71	16				1
2			0.0	0.0	0.0	0.0	40	71	26				2
3			0.0	0.0	53	0.0	32	62	0.0				3
4			0.0	0.0	164	0.0	27	53	2				4
5			0.0	0.0	119	0.0	25	47	3.0				5
6			0.0	0.0	85	77	115	36	0.0				6
7			8.4	0.0	38	205	205	26	5.0				7
8			48	0.0	36	138	166	0.0	3.0				8
9			7.4	0.0	266	480	128	0.0	2.0				9
10			5.0	68	272	240	122	0.0	0.0				10
11			3.6	68	153	200	145	0.0	0.0				11
12			1.0	27	50	188	110	0.0	0.0				12
13	N	N	0.0	3.6	199	155	100	0.0	2.0	N	N	N	13
14	O	O	0.0	1.7	217	183	91	0.0	1.0	O	O	O	14
15			0.0	7.0	130	279	164	0.0	0.0				15
16	F	F	0.0	8.4	75	190	263	0.0	5.0	F	F	F	16
17	L	L	0.0	6.0	52	267	213	0.0	3.0	L	L	L	17
18	O	O	0.0	4.5	25	183	183	0.0	2.0	O	O	O	18
19	W	W	0.0	4.5	10	125	158	21	2.0	W	W	W	19
20			0.0	8.4	5.0	125	135	42	5.0				20
21			0.0	8.4	20	115	109	10	6.0				21
22			0.0	7.4	0.0	115	105	14	5.0				22
23			0.0	6.7	0.0	510	95	10	2.0				23
24			0.0	5.3	0.0	205	73	7.2	0.0				24
25			0.0	0.0	0.0	172	78	7.2	0.0				25
26			0.0	0.0	0.0	872	150	0.0	0.0				26
27			0.0	0.0	0.0	229	164	0.0	0.0				27
28			0.0	0.0	0.0	169	101	0.0	0.0				28
29			0.0	0.0	0.0	75	101	4.0	0.0				29
30			0.0	0.0	0.0	60	71	2.0	0.0				30
31			0.0	0.0	0.0	0.0	4.0	4.0					31
MEAN			2.4	7.6	70	181	117	16	3.2				MEAN
MAX.			48	68	272	872	263	71	26				MAX.
MIN.			0.0	0.0	0.0	0.0	25	0.0	0.0				MIN.
AC. FT			144	467	3908	11160	6969	966	188				AC. FT

E = ESTIMATED
NR = NO RECORD
+ = DISCHARGE MEASUREMENT OR
* OBSERVATION OF NO FLOW

= E AND *

MEAN DISCHARGE	DISCHARGE	MAXIMUM GAGE HT	DISCHARGE	MINIMUM GAGE HT	TOTAL
32.9	1116	3.72	1600	10	ACRE FEET 23802

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R MOB&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
36 58 30	120 12 12	NE15 11S 16E				1936-SEP 40 OCT 41-SEP 42 JUL 44-DATE		1936		0.00	LOCAL
Station located left bank 100 feet downstream from County Road 19 bridge. Equipped with Stevens Type F recorder. Station records natural runoff as well as Central Valley Project water. Records furnished by Madera Irrigation District.											

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B64300	CHOWCHILLA RIVER, WEST FORK NEAR MARIPOSA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.0 *	0.2	0.8	1.9	28	19	46	33	7.7	2.2			1
2	0.0	0.6	0.8	1.8	551	17	41	31 *	7.2	2.2			2
3	0.0	0.5	22	1.8	163	17	41 *	33	7.2	2.1			2
4	0.0	0.4	59 *	1.8	308	17 *	40	38	6.9	2.0			4
5	0.0	0.4	9.6	1.7	118 *	47	103	31	6.3 *	2.0			5
6	0.0	0.4	4.0	8.1	52	145	97	30	5.8	1.8			6
7	0.0	0.4	2.8	11	41	159	64	29	5.3	1.6	*		7
8	0.0	0.5 *	2.2	84	41	149	92	27	5.1	1.5			8
9	0.0	0.5	1.9	32 *	470	76	93	25	4.6	1.4			9
10	0.0	0.6	1.7	15	501	71	83	25	4.3	1.2			10
11	0.0	0.6	1.6	9.7	106	60	76	24	4.0 *	1.1			11
12	0.0	0.6	1.5	7.2	60	57	67	23	3.6	1.0	N	N	12
13	0.0	0.5	1.5	6.1	132	68	60	22	3.7	0.9	O	O	13
14	0.0	0.5	1.4	5.4	94 *	64	78	21	3.3	0.9			14
15	0.0	0.5	1.4	4.9	53	64	137	20	3.1	0.9			15
16	0.0	0.6	1.4	4.5	42	109	106	21	2.9	1.2	F	F	16
17	0.0	0.6	1.3	4.1	35	74	82	20	2.9	1.3	L	L	17
18	0.0	0.6	1.3	4.0	31	58	68	18	3.1	1.2	O	O	18
19	0.0	0.6	1.2	3.7	30	51	62	17	3.2	1.0	W	W	19
20	0.0	0.7	1.2	3.7	42	46	55	17	3.1	0.9			20
21	0.0	1.8	1.2	3.5	32	56	52	16	3.1	0.8			21
22	0.0	5.9	1.3	3.3	27	285	47	15	3.0	0.7			22
23	0.0	2.1	1.2	3.2	25	63	43	14	2.8 *	0.6			23
24	0.0	1.4	1.1	3.1	24	67	45	14	2.8	0.6			24
25	0.0	1.1	1.1	3.1	23	296 *	53	12	3.1	0.5			25
26	0.0	1.0	1.1	3.1	21	132	43	12	3.0	0.4			26
27	0.0	0.9	1.2	3.1	20	90	39	11	2.9	0.4			27
28	0.2	0.9	3.3	2.9	20	71	36	10	2.6	0.1			28
29	0.3	0.8	2.4	2.9	62	35 *	9.5	2.4	0.0				29
30	0.1	0.8	1.8	3.0	56	34	8.8	2.2 *	0.0				30
31	0.2	1.8	2.9	53				8.1	0.0				31
MEAN	0.0	0.9	4.4	8.0	110	66.2	64.7	20.5	4.1	1.0			MEAN
MAX.	0.3	5.9	84	551	296	137	38	7.7	2.2				MAX.
MIN.	0.0	0.2	0.8	1.7	20	17	34	8.1	2.2	0.0			MIN.
AC. FT.	2	54	270	489	6129	5298	3848	1260	241	64			AC. FT.

E = ESTIMATED
NR = NO RECORD
* = DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
= E AND *

MEAN DISCHARGE 24.4	DISCHARGE 1170	GAGE HT 6.53	MO 2	DAY 9	TIME 0530	DISCHARGE 0.0	GAGE HT. 1.35	MO 10	DAY 1	TIME 0000	TOTAL ACRE FEET 17650
---------------------------	-------------------	-----------------	---------	----------	--------------	------------------	------------------	----------	----------	--------------	-----------------------------

LOCATION			MAXIMUM DISCHARGE				PERIOD OF RECORD				DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD				DISCHARGE	GAGE HEIGHT DHLY	PERIOD		ZERO ON GAGE	REF DATUM	
			CFS	GAGE HT	DATE				FROM	TO			
37 25 14	119 52 25	SE10 6S 19E	4350E	8.93	1-25-69	NOV 57-DATE			1957		0.00	LOCAL	

Station located 15 feet downstream from Indian Peak Road Bridge, 6.7 miles southeast of Mariposa. Drainage area is 33.6 square miles. Altitude of gage is 1,680 feet (from topographic map). There are no upstream impairments.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR		STATION NO.	STATION NAME										
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1				0.0 *	0.0	0.0	52 *	7.0 *				8.0	1
2				0.0	0.0	0.0	24	0.6				0.0 *	2
3				0.0	0.0	0.0	8.0	2.1	*			0.0	3
4				0.0	28	0.0 *	0.6	1.6				0.0	4
5				0.0	142	0.0	0.6	0.0				0.0	5
6				0.0	539 *	0.0	0.3	0.0				0.0	6
7				0.0	280	0.0	44	0.0				0.0	7
8				0.0	104	0.0	323	0.0				0.0	8
9				0.0	48	328	300	0.0				0.0	9
10				0.0	182	581	204	0.0				0.0	10
11				0.0	1010	336	136	0.0				0.0	11
12				0.0	976	282	110	0.0				0.0	12
13	N	N	N	0.0	443	224 *	88	0.0	N	N	N	0.0	13
14	O	O	O	0.0	240	214	54	0.0	O	O	O	0.0	14
15	O	O	O	0.0	396 *	224	42	0.0 *				0.0	15
16	F	F	F	0.0	443	280	45 *	0.0	F	F	F	0.0	16
17	L	L	L	0.0	270	260	122	0.0	L	L	L	0.0	17
18	O	O	O	0.0	165 *	298 *	163	0.0	O	O	O	0.0	18
19	W	W	W	0.0	78	278	112	0.0	W	W	W	0.0	19
20	W	W	W	0.0 *	49	140	77	0.0				0.0	20
21				0.0	24	74	54	0.0				0.0	21
22				0.0	16	49	33	0.0				0.0	22
23				7.5	5.8	226	22	5.8				0.0	23
24				5.8	14	546	20	0.0				0.0	24
25				2.7	2.4	300	3.0	0.0				0.0	25
26				0.0	0.0	306 *	0.0	0.0				0.0	26
27				0.0	0.0	934	0.0	0.0				0.0	27
28				0.0	0.0	684	12	0.0				0.0	28
29				0.0	0.0	308	20	0.0				0.0	29
30				0.0	0.0	57	114	0.0				0.0	30
31				0.0	0.0	77	0.0	0.0				0.0	31
MEAN				0.5	195	226	69	0.6				0.3	MEAN
MAX.				7.5	1010	934	323	7.0				8.0	MAX
MIN.				0.0	0.0	0.0	0.0	0.0				0.0	MIN
AC. FT.				32	10820	13900	4133	34				16	AC. FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN
 DISCHARGE
 40

MAXIMUM
 DISCHARGE
 1340

MINIMUM
 DISCHARGE
 0

TOTAL
 ACRE FEET
 28930

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M D B A M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO OH GAGE	REF DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 08 52	120 36 17	SE13 9S 12E	21700	17.58	2-25-69	DEC 64-DATE			1964	90.00	USGS

Station located on left bank 2.8 miles below Washington Road and 6.4 miles west of El Nido. This station is equipped with a radio telemeter. Flows regulated above station. Station records flows from San Joaquin, Fresno, Chowchilla Rivers and Kings River water via James Bypass.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B62400	MARIPOSA CREEK NEAR CATHEYS VALLEY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		3.9	1.0	3.7	84	26	69	37	7.6	1.8			1
2		3.5	0.8	3.2	1550	24	61	36 *	7.2	1.8			2
3		2.1	100	2.8	594	22 *	56 *	34	7.1	1.8			3
4		1.5	254 *	2.7	626	22	53	39	6.8	1.8			4
5		1.3	44	2.4	315	40	188	33	6.3 *	1.8			5
6		1.2	18	26	140 *	184	231	30	5.6	1.6			6
7		1.2 *	11	46	97	376	185	29	5.2	1.4			7
8		1.5	8.2	271	78	316	179	28	5.0	1.2			8
9		1.6	6.7	105 *	516	148	172	26	4.3	1.1			9
10		1.6	6.1	44	738	147	150	25	3.8	1.0			10
11		1.5	5.7	26	199	126	117	24	3.5 *	0.B			11
12	N	1.5	5.3	19	120	101	98	23	3.3	0.7	N	N	12
13	O	1.3	5.1	15	364	117	84	21	3.2	0.7	O	O	13
14	O	1.4	5.0	13	262 *	135	84	20 *	2.9	0.6	O	O	14
15		1.5	5.0	11	139	128	148	19	2.7	0.7			15
16	F	1.5	5.1 *	9.5	102	259	136	19	2.6	0.9	F	F	16
17	L	1.6	4.7	8.3	79	185	115	18	2.6	1.1	L	L	17
18	O	1.6	4.3	7.8	64	137	96	17	2.9	1.0	O	O	18
19	W	1.7	4.1	7.1	57	111	83	16	3.1	0.9	W	W	19
20		1.6	3.8	6.5	77	93	74	16	3.3	0.8			20
21		3.9	3.6	6.0	58	88	68	16	3.2	0.7			21
22		17	3.5	5.6	47	612	62	15	3.0	0.6			22
23		6.3	3.1	5.3	43	183	55	14	2.7 *	0.6			23
24		3.5	2.8	5.1	39	139	49	13	2.8	0.5			24
25		2.5	2.7	4.9	36	502 *	53	13	3.2	0.5			25
26		1.9	2.6	4.8	32	235	53	12	2.9	0.4			26
27		1.6	2.7	4.6	30	159	46	11	2.5	0.3			27
28		1.4	1.9	4.3	28	126	42	10	2.3	0.3			28
29		1.2	7.7	4.4	104	39 *	9.5	20	2.0	0.3			29
30		1.0	5.0	4.3	90	38	8.7	19 *	1.9	0.2			30
31		4.4	4.3	4.3	81	81	8.1			0.2			31
MEAN		2.5	17.7	22.1	233	162	96.1	20.7	3.9	0.9			MEAN
MAX.		17	254	271	1550	612	231	39	7.6	1.8			MAX.
MIN.		1.0	0.8	2.4	28	22	38	8.1	1.9	0.2			MIN.
AC. FT.		149	1085	1356	12920	9949	5720	1270	229	56			AC. FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MINIMUM DISCHARGE	TOTAL ACRE FEET
45	2320	8.46	32730

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 23 55	120 00 10	NE21 6S 18E	7460E	11.63	2-24-69	NOV 57-DATE		1957		0.00	LOCAL

Station located at county road bridge, 5.6 miles east of Catheys Valley School. Tributary to San Joaquin River via Eastside Bypass. Drainage area is 65.7 square miles. Maximum discharge of record from rating curve extended above 4,700 cfs. Altitude of gage is 1,230 feet (from topographic map). There are no upstream impairments.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME												
			MARIPOSA CREEK BELOW MARIPOSA RESERVOIR											
1975	B62100													

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1			0.0	7.2	2.7	9.2	47	28	3.1	2.1			1
2			0.0	7.0	584	8.0	39	28	2.9	1.8			2
3			0.0	8.8	765	7.6	33	27	2.8	1.7			3
4			75	8.8	717	7.4	30	29	2.7	1.7			4
5			134	8.8	723	7.8	80	34	2.5	1.7			5
6			26	8.8	645	50	37	30	2.3	1.5			6
7			20	23	490	128	33	29	2.2	1.5			7
8			12	113	207	400	218	30	2.0	1.3			8
9			9.2	214	188	302	204	30	2.0	1.0			9
10			7.6	70	544	161	182	31	1.8	0.6			10
11			7.0	31	536	149	128	30	2.1	0.0			11
12			6.6	21	342	94	94	29	2.5	0.0			12
13	N	N	6.6	17	322	78	72	29	2.4	0.0	N	N	13
14	O	O	6.0	14	420	161	56	28	2.5	0.0	O	O	14
15			6.0	14	338	137	100	28	2.5	0.0			15
16	F	F	5.8	12	143	188	134	26	2.5	0.0	F	F	16
17	L	L	5.8	12	70	274	119	25	2.6	0.0	L	L	17
18	O	O	5.6	11	44	188	90	23	2.5	0.0	O	O	18
19	W	W	5.4	10	38	146	68	21	2.6	0.0	W	W	19
20			5.4	9.2	38	84	54	18	2.4	0.0			20
21			5.4	36	62	47	16	2.4	0.0				21
22			5.4	2.9	24	367	43	14	2.3	0.0			22
23			5.2	2.7	19	4.4	38	13	2.4	0.0			23
24			5.2	2.6	15	256	34	11	2.4	0.0			24
25			5.2	2.6	14	279	35	8.4	2.4	0.0			25
26			5.4	2.6	12	445	38	7.2	2.4	0.0			26
27			5.4	2.5	11	306	35	6.4	2.4	0.0			27
28			5.4	2.5	10	170	31	5.4	2.3	0.0			28
29			6.8	2.5	102	30	4.8	2.2	0.0				29
30			9.6	2.4	78	28	3.8	2.2	0.0				30
31			7.6	2.3	62	3.4							31
MEAN			13	21	261	166	73	21	2.4	0.5			MEAN
MAX			134	214	765	445	218	34	3.1	2.1			MAX
MIN			0.0	2.3	2.7	4.4	28	3.4	1.8	0.0			MIN
AC FT.			814	1290	14470	10200	4320	1280	143	30			AC FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

 MEAN
DISCHARGE
44.9

 MAXIMUM
DISCHARGE
765

 MINIMUM
DISCHARGE
0

 GAGE HT.
MO DAY TIME
2 3 Daily Mean

 GAGE HT.
MO DAY TIME

 GAGE HT.
MO DAY TIME

 TOTAL
ACRE FEET
32550

LOCATION		MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE	
LATITUDE	LONGITUDE	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD	ZERO ON GAGE	REF DATUM
		CFS	GAGE HT.	DATE					
37 16 52	120 09 45	NE 36 7S 16E	6020	12-24-55	NOV 52-DATE		1952	337.63	USCGS
Station located 1.5 miles downstream from Mariposa Dam. Tributary to San Joaquin River via Eastside Bypass. Flow regulated by Mariposa Reservoir since 1948. Records furnished by U. S. Corps of Engineers. Drainage area is 110 square miles.									

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	806170	OWENS CREEK BELOW OWENS RESERVOIR

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.0	1.0	1.0	2.0	3.0	6.0	11	4.5	1.0	0.5	0.1	0.5	1
2	0.0	1.0	1.0	2.0	NR	5.4	10	4.5	1.0	0.5	0.0	0.5	2
3	0.0	0.5	10	2.0	NR	4.8	9.0	4.5	1.0	0.5	0.0	0.5	3
4	0.0	0.5	16	1.0	NR	4.8	9.3	3.6	1.0	0.5	0.0	0.5	4
5	0.0	0.5	7.2	2.0	128	8.1	26	3.6	1.0	0.5	0.0	0.5	5
6	0.0	0.5	3.0	2.0	124	24	42	3.6	1.0	0.5	0.0	0.3	6
7	0.1	0.5	2.0	3.9	110	22	53	3.3	1.0	0.5	0.0	0.2	7
8	0.3	0.5	2.0	7.2	89	39	28	3.3	0.5	0.4	0.0	0.3	8
9	0.5	0.5	2.0	6.3	69	13	22	3.0	0.5	0.4	0.1	0.5	9
10	0.5	0.5	2.0	4.2	91	24	15	3.0	0.5	0.4	0.2	0.5	10
11	0.5	0.5	2.0	3.0	79	18	12	3.0	0.5	0.3	0.2	0.5	11
12	0.5	0.5	2.0	3.0	25	12	11	3.0	0.5	0.3	0.3	0.5	12
13	0.5	0.5	2.0	2.0	41	25	10	3.0	0.5	0.4	0.5	0.5	13
14	0.5	0.5	2.0	2.0	73	35	9.9	3.0	0.5	0.4	0.5	0.5	14
15	0.5	0.5	2.0	2.0	26	18	12	3.0	0.5	0.3	0.5	0.5	15
16	0.5	0.5	2.0	2.0	19	50	14	3.0	0.5	0.5	0.5	0.5	16
17	0.5	1.0	2.0	2.0	15	25	11	2.0	0.5	0.5	0.5	0.5	17
18	0.5	1.0	2.0	2.0	12	19	9.0	2.0	0.5	0.4	0.5	0.5	18
19	0.5	1.0	2.0	2.0	9.6	15	7.8	2.0	0.5	0.3	0.5	0.4	19
20	0.5	1.0	2.0	2.0	12	104	7.2	2.0	0.5	0.3	0.5	0.5	20
21	0.5	1.0	2.0	2.0	10	99	7.2	2.0	0.5	0.3	0.5	0.5 E	21
22	0.5	4.2	2.0	2.0	9.0	92	6.6	2.0	0.5	0.3	0.5	0.5 E	22
23	0.5	3.0	1.0	2.0	8.1	88	6.0	2.0	0.5	0.2	0.5	0.5 E	23
24	0.5	2.0	1.0	2.0	7.5	31	6.0	2.0	0.5	0.0	0.5	0.5 E	24
25	0.5	1.0	1.0	2.0	7.5	63	6.3	2.0	0.5	0.0	0.5	0.5 E	25
26	0.5	1.0	1.0	2.0	6.9	71	8.1	2.0	0.5	0.0	0.5	0.5 E	26
27	1.0	1.0	2.0	2.0	6.3	28	6.6	2.0	0.5	0.0	0.5	0.5 E	27
28	1.0	1.0	2.0	2.0	6.0	22	5.7	1.0	0.5	0.0	0.5	0.5 E	28
29	1.0	1.0	2.0	2.0	17	4.8	1.0	0.5	0.0	0.0	0.5	0.5 E	29
30	0.5	1.0	2.0	2.0	15	4.5	1.0	0.5	0.0	0.0	0.5	0.5 E	30
31	1.0	-	2.0	2.0	14	-	1.0	0.5	0.2	0.2	0.5	-	31
MEAN	0.4	1.0	2.7	2.4	NR	33	13	2.6	0.6	0.3	0.3	0.5	MEAN
MAX	1.0	4.2	16	7.2	NR	104	53	4.5	1.0	0.5	0.5	0.5	MAX
MIN	0.0	0.5	1.0	1.0	NR	4.8	4.5	1.0	0.5	0.0	0.0	0.2	MIN
AC. FT.	30	60	170	150	NR	2010	770	160	40	20	20	30	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW
— E AND n

MEAN DISCHARGE	M A X I M U M				M I N I M U M				TOTAL		
NR	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT DHLY	PERIOD		ZERO DH GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 18 28	120 11 35	SW 23 7S 16E	590		12-24-55	FEB 50-DATE			1950	338.22	USCGS

Station located 0.25 mile downstream from Owens Dam. Tributary to San Joaquin River via Eastside Bypass. Flow regulated by Owens Reservoir since 1949. Records furnished by U. S. Corps of Engineers. Drainage area is 25.6 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR		STATION NO.	STATION NAME
1975	B05570		BEAR CREEK BELOW BEAR RESERVOIR

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1				0.0	5.0	118	22	48	35	1.8	0.2		1
2				0.0	4.4	1048	20	41	34	1.7	0.4		2
3				0.0	4.1	862	19	38	33	1.9	0.6		3
4				113	10.0	660	14	35	33	1.8	0.5		4
5				80	3.8	435	17	56	33	2.0	0.5		5
6				27	4.4	148	58	97	33	1.5	0.4		6
7				14	24	104	82	230	32	2.4	0.3		7
8				11	221	88	318	188	31	1.3	0.3		8
9				7.8	139	308	121	139	30	1.1	0.3		9
10				7.0	58	566	88	98	28	0.9	0.2		10
11				6.2	32	191	123	80	27	0.8	0.2		11
12				5.4	21	105	78	68	26	0.7	0.2		12
13	N	N		4.4	17	252	72	57	25	0.7	0.2	N	13
14	O	O		4.1	13	365	127	51	24	0.6	0.2	O	14
15				4.1	11	135	129	54	21	0.5	0.2		15
16	F	F		4.1	9.0	96	227	66	21	0.4	0.2	F	16
17	L	L		3.8	7.8	76	185	60	19	0.3	0.1	L	17
18	O	O		3.8	7.4	57	109	50	17	0.3	0.0	O	18
19	W	W		3.5	6.6	50	81	44	15	0.3	0.0	W	19
20				3.5	6.6	70	74	41	13	0.3	0.0		20
21				3.5	6.2	68	56	40	13	0.3	0.0		21
22				3.5	5.8	51	524	39	11	0.3	0.0		22
23				3.5	5.4	44	182	38	10	0.3	0.0		23
24				3.5	5.0	35	111	38	8.6	0.4	0.0		24
25				3.5	5.0	32	451	40	7.8	0.4	0.0		25
26				3.5	4.7	29	308	50	6.2	0.3	0.0		26
27				3.5	4.7	27	139	41	5.0	0.2	0.0		27
28				3.8	4.7	24	100	39	4.4	0.2	0.0		28
29				4.1	4.4		86	37	3.5	0.2	0.0		29
30				4.1	4.4		74	37	2.6	0.2	0.0		30
31				4.4	4.1		58		2.0	0.0			31
MEAN MAX. MIN. AC.FT.				11	23	216	131	65	20	0.8	0.2		MEAN MAX. MIN. AC.FT.
				113	221	1048	524	230	35	2.4	0.6		
				0	3.8	24	14	35	2.0	0.2	0.0		
				680	1300	11990	8040	3850	1200	48	10		

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW
— E AND *

MEAN DISCHARGE 37.4	MAXIMUM DISCHARGE 1120	MAXIMUM GAGE HT. MO. DAY TIME	MINIMUM DISCHARGE 0	MINIMUM GAGE HT. MO. DAY TIME
---------------------------	------------------------------	-------------------------------------	---------------------------	-------------------------------------

TOTAL ACRE FEET 27120

LOCATION		MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM TO	ZERO OH GAGE	REF. DATUM	
		CFS	GAGE HT.	DATE						
37 21 27	120 14 05	NE 5 7S 16E	4460	12-24-55	JAN 55-DATE		1955	320.50	USCGS	

Station located approximately 0.75 mile downstream from Bear Dam. Tributary to San Joaquin River via Eastside Bypass. Flow regulated by Bear Reservoir since 1950. Records furnished by U. S. Corps of Engineers. Drainage area is 72.1 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY			
													1975	STATION NO.	STATION NAME	
1	100	318	50	57	56	69	214	180	218	142	164	126	1			
2	150	240	51	58	1799	65	206	172	128	134	146	144	2			
3	158	210	72	56	3494	61	192	140	184	124	126	124	2			
4	150	240	150	56	1840	58	198	162	162	138	122	83	4			
5	96	64	240	55	1672	61	230	156	132	160	98	100	5			
6	120	55	124	56	654	101	506	124	144	146	108	92	6			
7	104	53	90	56	420	218	452	118	158	126	112	89	7			
8	120	53	76	80	372	369	375	114	132	118	107	98	8			
9	120	53	69	612	665	295	342	122	130	120	130	120	9			
10	126	52	65	182	937	20B	268	172	128	124	140	136	10			
11	89	52	62	118	657	252	236	200	132	138	132	146	11			
12	83	52	57	90	342	198	218	186	118	164	118	166	12			
13	80	52	57	79	503	233	202	196	122	168	132	182	12			
14	78	52	56	66	1102	604	178	196	154	166	114	202	14			
15	70	52	55	61	485	368	168	182	182	160	120	162	15			
16	47	51	55	58	305	480	202	182	170	168	134	156	16			
17	45	51	55	57	228	495	172	186	154	158	107	164	17			
18	43	51	55	56	184	395	148	208	146	164	108	162	18			
19	43	50	54	55	162	440	166	206	110	172	144	182	19			
20	42	50	53	54	138	164	168	196	130	182	164	164	20			
21	41	52	53	54	160	138	136	190	118	158	160	162	21			
22	40	54	53	54	132	1376	128	180	140	128	164	166	22			
23	38	52	53	58	110	658	150	152	164	136	152	164	23			
24	38	51	52	60	96	416	144	122	164	130	164	158	24			
25	28	50	52	59	89	820	192	160	160	144	146	164	25			
26	64	50	52	58	83	673	218	156	154	120	126	138	26			
27	61	50	55	57	76	308	198	152	162	134	86	195	27			
28	66	50	59	56	73	240	188	130	160	122	80	142	28			
29	69	50	61	55	198	178	152	170	120	79	102	29				
30	52	50	60	55	190	172	130	152	140	88	95	30				
31	190		58	53	198	182	140	96					31			
MEAN	82	72	69	83	601	334	218	165	152	143	125	143				MEAN
MAX.	190	318	240	612	3494	1376	506	208	218	182	164	202				MAX.
MIN.	28	50	50	53	56	58	128	114	110	118	79	83				MIN.
AC. FT.	5060	4300	4270	5120	33390	20528	12980	10120	9060	8810	7670	8500				TOTAL

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW
— E AND *

MEAN DISCHARGE	4320	M A X I M U M	4320	M I N I M U M	28
DISCHARGE	GAGE HT.	M. O. DAY	DISCHARGE	GAGE HT.	M. O. DAY
179.3					

TOTAL ACRE FEET
12980

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B. & M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD			REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO	ZERO ON GAGE	
37 18 34	120 26 38	SW21 7S 14E	5,542	17.35	2-11-73	NOV 56-DATE		1956		75.00	ASSUMED

Station located 50 feet downstream from McKee Road Bridge, one mile east of Merced. Tributary to San Joaquin River via State Bypass. Plots registered with San Joaquin River Revolving Fund. Records furnished by the U. S. Corps of Engineers. Altitude of gage is 189 feet (from topographic map). Drainage area is 130 square miles. In December 1955, prior to installation of this station, a gage height of 22.9 feet was taken from a high water mark and the discharge was estimated as 9,500 cfs. Station installed in 1956; however, prior to 1969 records were not requested for publication by Department of Water Resources. Prior records available at U. S. Corps of Engineers office, Sacramento.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B05518	BEAR CREEK AT MERCED IRRIGATION DISTRICT WEST BOUNDARY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	88	269	17	15	13	74	174	206	218	92	70	92	1
2	123	231	19	14	245	75	279	204	254	92	91	96	2
3	180	169	54	16	638	71	281	177	235	105	94	92	3
4	140	133	209	14	708	68	309	177	209	79	83	87	4
5	116	NR	239	13	694	70	339	164	148	119	83	96	5
6	88	NR	137	13	560	107	500	119	91	126	64	66	6
7	70	NR	63	15	350	202	502	75	111	107	74	58	7
8	44	NR	37	19	264	306	444	86	128	86	87	75	8
9	70	NR	28	201	328	400	411	81	126	65	110	142	9
10	81	NR	24	177	621	254	449	56	101	72	110	178	10
11	101	NR	22	80	586	251	339	86	106	74	110	216	11
12	164	NR	20	46	311	256	264	102	97	59	128	209	12
13	56	16	18	35	254	189	283	113	103	101	133	183	13
14	42	16	17	29	674	524	219	147	106	101	110	226	14
15	38	15	16	19	514	482	204	153	107	130	106	199	15
16	23	13	16	17	263	378	254	151	109	155	134	128	16
17	12	16	16	16	163	631	244	152	97	155	119	133	17
18	14	11	16	15	204	383	236	191	79	124	124	156	18
19	14	11	15	14	171	269	244	234	83	112	191	159	19
20	12	11	15	14	151	206	246	186	92	137	241	139	20
21	10	12	14	13	159	169	226	203	104	121	210	185	21
22	10	15	14	13	150	244	155	228	86	101	173	191	22
23	11	12	15	13	124	514	209	211	125	85	156	185	23
24	10	11	14	13	110	536	190	178	137	57	211	175	24
25	16	10	14	14	102	422	258	187	137	67	146	156	25
26	14	10	14	14	97	800	308	221	114	64	117	162	26
27	70	11	14	13	91	455	295	184	102	64	38	161	27
28	28	13	16	13	84	284	323	212	68	67	46	206	28
29	53	14	18	10	229	301	210	93	62	72	72	146	29
30	36	16	18	10	202	244	207	99	40	74	90	30	30
31	66		16	10	142		208		56	107		107	31
MEAN	57	34	38	30	308	297	291	165	122	93	117	146	MEAN
MAX.	180	269	239	201	708	800	502	234	254	155	241	226	MAX.
MIN.	10	10	14	10	13	68	155	56	68	40	38	58	MIN.
AC. FT.	3481	2045	2311	1817	17114	18242	17316	10138	7270	5703	7164	8702	AC.FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN
DISCHARGE
140MAXIMUM
DISCHARGE
800GAGE HT
9.07 E
3MO
26
TIME
0600MINIMUM
DISCHARGE
10GAGE HT
0.66
MO
10
DAY
25
TIME
0300TOTAL
ACRE FEET
101300

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T & R M D B & M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD			REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 15 21	120 39 06	NE 9 8S 12E				1930-					

Station located 400 feet downstream from Crane Road Bridge, 6.6 miles southwest of Atwater.

Tributary to San Joaquin River via Eastside Bypass. Flow regulated by Bear and Burns Reservoirs.

Records furnished by Merced Irrigation District. Altitude of gage is 108 feet (from U. S. Geological Survey topographic map). Monthly runoff records dating back to 1947 are published in Bulletin No. 130-69.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B56100	BURNS CREEK BELOW BURNS RESERVOIR

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1			0.0	0.0	0.4	12	24	7.0					1
2			0.0	0.0	51	10	20	6.7					2
3			22	0.0	1163	8.5	17	6.7					3
4			22	0.0	587	8.5	16	6.1					4
5			2.8	0.0	308	14	51	4.6					5
6			0.7	0.0	142	91	184	3.4					6
7			0.2	0.0	116	39	92	3.2					7
8			0.0	4.3	108	119	50	2.8					8
9			0.0	59	282	44	43	2.6					9
10			0.0	17	243	54	28	2.2					10
11			0.0	14	126	76	23	1.7					11
12			0.0	4.9	84	37	20	1.4					12
13	N	N	0.0	3.0	210	96	16	1.4	N	N	N	N	13
14	O	O	0.0	1.7	348	240	14	1.3	O	O	O	O	14
15	W	W	0.0	1.5	116	114	14	1.0					15
16	F	F	0.0	1.3	76	222	14	0.8	F	F	F	F	16
17	L	L	0.0	1.0	58	114	14	0.8	L	L	L	L	17
18	O	O	0.0	1.0	43	74	12	0.8	O	O	O	O	18
19	W	W	0.0	0.8	34	52	10	0.7	W	W	W	W	19
20			0.0	0.8	39	40	8.5	0.5					20
21			0.0	0.7	39	32	8.0	0.3					21
22			0.0	0.7	27	580	7.5	0.2					22
23			0.0	0.6	22	160	7.0	0.0					23
24			0.0	0.6	18	94	7.0	0.0					24
25			0.0	0.5	17	301	7.0	0.0					25
26			0.0	0.5	15	152	9.0	0.0					26
27			0.0	0.5	14	94	12	0.0					27
28			0.0	0.4	12	58	9.0	0.0					28
29			0.0	0.4		43	7.5	0.0					29
30			0.0	0.3		36	7.0	0.0					30
31			0.0	0.2		30	0.0						31
MEAN MAX.			1.5	3.7	154	98	25	1.8					MEAN MAX.
MIN. A.C.FT.			22	59	1163	580	184	7.0					MIN. A.C.FT.
			0.0	0.0	0.4	8.5	7.0	0.0					
			95	230	8520	6040	1490	111					

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN		MAXIMUM				MINIMUM				TOTAL	
DISCHARGE	DISCHARGE	GAGE HT.	MO	DAY	TIME	DISCHARGE	GAGE HT.	MO	DAY	TIME	ACRE FT.
22.8	1356					0					16490

MEAN MAX.

MIN. A.C.FT.

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC T. & R. M D B & M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 22 27	120 16 35	NE 36 6S 15E	2590		12-24-55	APR 50-DATE		1950		260.60	USCGS

Station located 0.5 mile downstream from Burns Dam. Tributary to San Joaquin River via Bear Creek. Flow regulated by Burns Reservoir since 1950. Records furnished by U. S. Corps of Engineers. Drainage area is 73.8 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

			WATER YEAR	STATION NO.	STATION NAME								
			1975	B07400	SAN JOAQUIN RIVER NEAR STEVINSON								
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	143	71	44	43	56	139	447	147 *	142	51	38	129	1
2	123	200	44	41 *	117	158	325 *	135	134	49	36	130	2
3	164 *	210	65	41	815	147	297	133	137	44	32	141 *	3
4	208	185	198	42	2480	131	302	116	106	45	34 *	167	4
5	175	159	360 *	42	2610 *	112	357	114	87	41	35	156	5
6	151	89	369	42	2730	154	400	116	63 *	44	41	132	6
7	125	63	261	42	2480	186	519	82	49	50 *	43	90	7
8	106	62 *	193	44	1950	275	591	67	50	53	44	81	8
9	90	58	146	55	1520	499	830	66	50	54	44	64	9
10	92	51	88	186	1310	663	972	62	51	52	48	119	10
11	90	58	72	238	1490	955	838	59	53	50	51	148	11
12	90	53	67	198	2150	950	620	60	59	49	56	190	12
13	95	45	66	151	2090	708 *	478	61	53	47	55	215	13
14	73	54	66	118	1730	697	400	59	49	41	53	238	14
15	72	59	59	98	1790	946	252 *	63 *	48	43	64	267	15
16	68	57	57	85	1700	884	224	66	51	52	79	266	16
17	59	55	69	77	1330	966	240	88	49	87	104	234	17
18	46	53	69	71	974	1060	301	95	57	89	98	221	18
19	40	52	65	66	721	951	355	113	51	75	71	202	19
20	42	50	61	78	533	844	331	131	49	63	150	194	20
21	43	49	61	87	420	659	320	106	45	71	218	186	21
22	40	49	50	82	352	546	276	110	42	66	234	186	22
23	37	50	55	87	240	918	190	115	42	57	230	184	23
24	38	41	47	88	187	1490	157	115	41	45	244	185	24
25	41	46	43	85	144	1570	156	137	39	39	253	188	25
26	43	47	42	81	96	1360	265	161	41	35	213	196	26
27	40	45	40	79	102	1580	266	147	39	33	152	178	27
28	47	46	38	75	119	1800	258	103	57	33	139	183	28
29	53	46	42	63	1450	270	106	52	33	112	214	214	29
30	56	45	44	51	966	241	89	40	34	112	162	20	30
31	52	46	51	667			119	36	36	123		31	
MEAN MAX. MIN. AC.FT.	82 208 37 5042	71.6 210 41 4260	94.4 369 38 5806	82.5 238 41 5131	1151 2730 56 63940	785 1800 112 48260	383 972 156 22770	101 161 59 6238	60.9 142 39 3622	50.4 89 33 3096	103 253 32 6319	176 267 81 10450	MEAN MAX. MIN. AC.FT.

E = ESTIMATED

NR = NO RECORD

* = DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

= E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE				PERIOD OF RECORD				DATUM OF GAGE				
255	DISCHARGE	GAGE HT	MO.	DAY	TIME	DISCHARGE	GAGE HEIGHT ONLY	MO.	DAY	TIME	PERIOD	ZERO ON GAGE	REF DATUM
	2800	70.34	2	6	0515		36	60.89	10	23	1415		

TOTAL ACRE FEET
184900

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE				
LATITUDE	LONGITUDE	I 4 SEC T & R M D B M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	MO.	DAY	TIME	PERIOD	ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE								
37 17 42	120 50 00	26 7S 10E	26740	76.23	2-26-69	OCT 61-DATE	MAY 61-SEP 61	1961			0.00	USCGS	

Station located on bridge 2.3 miles south of Stevenson on Lander Avenue. Flows regulated by upstream reservoirs and diversions. Drainage area is 7,388 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	800975	PANOCHE DRAIN NEAR DOS PALOS

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	26	35	19	17	49	70	70 *	50	70	56 *	72 *	39	1
2	26 *	32	20	16 *	82	67	61	52	70	56	55	36 *	2
2	27	25	29	16	95	66	68	48	65 *	59	59	44	3
4	25	23	33	18	75	73 *	66	49	69	66	61	42	4
5	22	22	22	18	63	78	71	48	72	66	57	38	5
6	25	25	21	19	44	89	64	51	71	72	54	46	6
7	24	23 *	22	20	53	91	56	55	66	71	64	45	7
8	23	29	22 *	19	44	89	55	58	65	66	66	40	8
9	27	29	21	17	49	86	51	54	68	64	58	47	9
10	29	26	20	21	48	87	50	55	65	67	58	47	10
11	30	30	21	25	32	85	56	66	65	67	60	42	11
12	32	28	21	28	36	85	49	67	63	62	55	39	12
13	37	34 E	20	32	63	83	44	54	69	65	51	39	13
14	33	34 E	19	31	62	85	53	66	60	70	56 *	37	14
15	35	35 E	19	29	57	79	56	69 *	61	73	56	33	15
16	28 *	29	19	25	57	73	65 *	70	59	72 *	58	37 *	16
17	27	23	20	30	51	66	53	66	63 *	70	52	37	17
18	28	24	19	33	48 *	71 *	50	73	72	60	50	38	18
19	30	24 *	18	41	50	64	50	78	78	64	56	35	19
20	28	28	18	43 *	53	57	49	73	74	63	56	32	20
21	25	31	17	40	58	52	54	83	77	68	55	29	21
22	23	28	17	37	60	65	51	88	80	63	51	25	22
23	22	25	18	33	70	70	55	88	82	63	52	25	23
24	24	24	17	38	69	73	64	72	89	64	49	24	24
25	26	23	18	46	72	73	63	67	93	56	53	30	25
26	31	21	18	47	69	72	69	62	96	54	51	29	26
27	37	21	18 *	51	72	73	62	56	96	53	52	26	27
28	39	20	20	51	72	76	63	60	82	60	49	26	28
29	34	19	18	50		66	54	66	60	66	49	27	29
30	32	20	17	50		65	51	69	58	63	48	24	30
21	30		17	42		72		73		68	47		21
MEAN	28.5	26.3	19.9	31.7	59.0	74.3	57.4	64.1	71.9	64.1	55.2	35.3	MEAN
MAX	39	35	33	51	95	91	71	88	96	73	72	47	MAX
MIN.	22	19	17	16	32	52	44	48	58	53	47	24	MIN.
AC. FT.	1755	1567	1226	1950	3279	4567	3418	3939	4280	3941	3590	2100	AC. FT.

E = ESTIMATED

NR = NO RECORD

* = DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

= E AND *

MEAN DISCHARGE	MAXIMUM				MINIMUM				TOTAL ACRE FEET		
48.9	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	35410
119	7.20	2	3	0100		14	1.86	1	2		

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
36 55 25	120 41 19	NW 5 12S 12E	69. a	9.19	11-24-65	FEB 59-SEP 62	OCT 64-SEP 68	OCT 62-JUL 63	1959	-2.00	LOCAL
			89. a	9.25	2-13-73						
				7.20	2-03-75	APR 69-DATE					

Station located midway between Outside and Main Canals 0.5 mile south of Main Canal levee road, 5.6 miles southwest of Dos Palos. This is drainage returned to San Joaquin River. Station is operated under a cooperative agreement between the Department of Water Resources and the Panache Drainage District. Altitude of gage is approximately 140 feet (from U. S. Geological Survey topographic map).

a In April 1969, the gage height-discharge relationship was changed by removing the control boards from the entrance to the culvert increasing its capacity.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR		STATION NO.	STATION NAME
1975		B00470	SALT SLOUGH NEAR STEVINSON

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	143	165	97	83	104	190	332	169 *	63	146	66	226	1
2	154	144	77	82 *	142	198	293	154	72	142	90	230	2
3	156 *	132	94	78	186	202	265	129	74 *	131	99	204 *	3
4	132	131	135	58	229	206	265	124	81	130	113 *	162	4
5	118	133	146 *	61	250 *	212	281	141	64	138	139	155	5
6	102	132	143	61	249	226	326	136	68	135	127	157	6
7	93	131 *	139	64	243	305	360	110	80	142 *	121	148	7
8	92	147	133	64	224	342	399 *	100 *	82	136	119	131	8
9	99	141	133	56	200	329	435	103	80	106	125	139	9
10	92	144	141	54	186	331 *	432	107	85	105	107	155	10
11	76	144	156	54	180	331	410	120	98	99	115	150	11
12	63	135	158	51	185	338	377	131	81	85	127	148	12
13	68	137	160	57	219	326	345	149	82	104	106	134	13
14	85	150	162	62	239	325	330	133	76	130	110	138	14
15	79	151	160	64	233	352	286	138	63	118	118	133	15
16	59	148	157	62	233	362	250	141	89	136	135	133	16
17	53	146	157	63	221	359	250	138	123	168	136	95	17
18	57	148	118	59	214	352	245	141	92	163	168	89	18
19	56	172	113	62	207	357	231	144	87	140	244	114	19
20	65	169	105	71	191	349	214	132	95	132	325	129	20
21	73	141	97	92	187	332	202	112	112	139	314	130	21
22	72	143	93	101	186	332	187	129	145	147	291	134	22
23	72	143	91	97	193	346	169	138	160	159	293	129	23
24	69	146	103	105	206	369	137	124	136	142	304	104	24
25	80	148	105	100	187	401	161	113	132	112	309	88	25
26	87	147	103	98	159 *	395	169	115	133	89	302	99	26
27	96	140	102	93	156	378	184	122	146	108	267	99	27
28	104	128	101	106	177	400	184	126	142	110	268	122	28
29	105	125	89	110	401	155	96	151	87	240	148	29	29
30	108	108	82	101	362	139	83	142	74	250	161	30	30
31	130	83	95	95	340	65	72	247					31
MEAN	91.6	143	120	76.3	200	324	267	125	101	123	187	139	MEAN
MAX.	156	172	162	180	250	401	435	169	160	168	325	230	MAX.
MIN.	53	108	77	51	104	190	137	65	63	72	66	88	MIN.
AC. FT.	5629	8479	7384	4689	11080	19950	15890	7672	6018	7587	11470	8299	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	DISCHARGE	MAXIMUM DISCHARGE				DISCHARGE	MINIMUM DISCHARGE				TOTAL ACRE FEET	
156	445	DISCHARGE	GAGE HT.	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	114200
		CFS	GAGE HT.	DATE			49	64.18	1	12	0030	

LATITUDE	LONGITUDE	1 SEC T & R M D B & M	LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
			OF RECORD			DISCHARGE			GAGE HEIGHT ONLY			PERIOD		
			CFS	GAGE HT.	DATE	FRDM	TO	ZERO ON GAGE	REF DATUM					
37 14 52	120 51 04	SE10 8S 10E	70.35a	6-10-69	2-14-73					1968	0.00			USCGS
			537	69.62										

Station located at Lander Avenue bridge, 5.5 miles south of Stevenson. This includes drainage being returned to San Joaquin River. Drainage area is 227 square miles.

a This maximum gage height of record was affected by backwater and does not represent the maximum discharge.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B52580	BEAN CREEK NEAR COULTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.1	0.3	0.4	0.7	1.4	2.3	9.4	5.6	2.1	1.0	0.7	0.3	1
2	0.3	0.3	0.4	0.7	116	2.1 *	8.3	5.2 *	2.3	1.0	0.6	0.3	2
3	0.3	0.3	0.4	0.7	47	2.1 *	8.1	5.1	1.8	1.0	0.6	0.3	3
4	0.4 *	0.3	0.4	0.7	47	2.1	8.1	5.4	1.8	1.0	0.6	0.3 *	4
5	0.3	0.3	2.4	0.7	33	4.3	15	5.1	1.7 *	0.9	0.5	0.3	5
6	0.3	0.3	0.7	3.4	19 *	8.1	13	4.8	1.7	0.9	0.6	0.2	6
7	0.3	0.3 *	0.7	5.2	12	32	12	4.6	1.5	0.9	0.6 *	0.2	7
8	0.4	0.3	0.7	26 *	13	41	13	4.5	1.5	0.8	0.6	0.2	8
9	0.4	0.3	0.7	21	80	23	18	4.3	1.6	0.8	0.5	0.3	9
10	0.4	0.3	0.6	9.9	75	18	20	4.0	1.5	0.8	0.5	0.3	10
11	0.4	0.3	0.6	3.2	25	15	16	3.9	1.4	0.8	0.5	0.3	11
12	0.5	0.3	0.6	2.6	18	12	13	3.7	1.5	0.8	0.5	0.2	12
13	0.5	0.3	0.6	2.4	16	12	11	3.7	1.5	0.8	0.5	0.3	13
14	0.5	0.3	0.6	2.1	22	14	10	3.5	1.3	0.8	0.5	0.3	14
15	0.5	0.3	0.7	1.4	17	14	12	3.4	1.4	0.8	0.5	0.3	15
16	0.5	0.3	0.6	1.3	14	22	13	3.5	1.4	0.8	0.4	0.3	16
17	0.5	0.3	0.6	1.2	9.0	20	12	3.6	1.4	0.8	0.4	0.3	17
18	0.5	0.3	0.6	1.2	7.4	17	10	3.2	1.3	0.8	0.5	0.2	18
19	0.6	0.3	0.6	1.1	6.8	14	9.1	3.2	1.3	0.8	0.6	0.2	19
20	0.6	0.3	0.6	1.0	8.0	13	8.5	3.3	1.4	0.8	0.5	0.2	20
21	0.3	0.6	0.6	1.0	6.6	16	8.3	3.2	1.3	0.8	0.5	0.2	21
22	0.1	0.5	0.7	5.4	6.6	59	7.8	3.2	1.2	0.7	0.4	0.2	22
23	0.2	0.4	0.7	4.3	6.3	26	7.5	2.9	1.3	0.7	0.4	0.2	23
24	0.2	0.4	0.6	6.6	6.1	21	11	3.0	1.4	0.7	0.4	0.1	24
25	0.2	0.4	0.6	0.8	148 *	18	2.7	1.3	0.7	0.4	0.2	25	
26	0.2	0.3	0.6	0.8	5.6	42	11	2.6	1.2	0.7	0.4	0.2	26
27	0.2	0.3	0.7	0.7	17	25	8.3	2.7	1.2	0.7	0.4	0.1	27
28	0.6	0.3	0.9	0.7	15	18	7.3	2.6	1.1	0.7	0.4	0.1	28
29	0.4	0.3	0.7	0.7	15	6.5	2.5	1.1	0.7	0.4	0.1	29	
30	0.3	0.4	0.7	0.7	13	6.0	2.1	1.1 *	0.7	0.4	0.2	30	
31	0.4	0.7	0.7	11				2.3	0.7	0.4	0.4	0.1	31
MEAN	0.4	0.3	1.1	3.3	23.9	22.0	11.0	3.7	1.5	0.8	0.5	0.2	MEAN
MAX.	0.6	0.6	9.8	26	116	148	20	5.6	2.3	1.0	0.7	0.3	MAX.
MIN.	0.1	0.3	0.4	0.7	-5.6	2.1	6.0	2.1	1.1	0.7	0.4	0.1	MIN.
AC. FT.	23	20	69	204	1326	1353	657	225	86	49	30	14	AC. FT.

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	DISCHARGE	MAXIMUM				DISCHARGE	GAGE HT.	MO	DAY	TIME	MINIMUM	GAGE HT.	MO	DAY	TIME	TOTAL ACRE FEET
5.60	362	5.22	3	25	0600	0.1	1.15	10	1	1830						4056

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	I 4 SEC T & R M D B M	OF RECORD			DISCHARGE	GAGE HEIGHT		PERIOD FROM	ZERO ON GAGE	REF DATUM
			CFS	GAGE HT.	DATE		MO	DAY			
37 44 29	120 07 00	SE20 28 17E	1090	8.13	1-21-69	DEC 65-DATE			1965	0.00	LOCAL

Station located on right bank 0.8 mile east of Greeley Hill and 4.8 miles northeast of Coulterville. Maximum discharge of record from rating curve extended above 758 cfs. There are no upstream impairments. Drainage area is 7.4 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

	WATER YEAR	STATION NO.	STATION NAME											
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY	
1	0.0	0.8	0.7	1.5	49	4.3	12	8.7	1.4	0.5	0.2	0.1 E	1	
2	0.1	0.6	0.7	1.5	421	3.7	11	7.9 *	1.3	0.5	0.3	0.1 E	2	
3	0.1	0.5	8.3	1.3	109	3.5 *	11	7.6	1.3	0.5	0.2	0.1 E	3	
4	0.2 *	0.5	13	*	1.4	153	3.2	10	7.5	1.2	0.5	0.1	0.1 *	4
5	0.2	0.5	4.2	1.3	57	5.4	22	6.8	1.1 *	0.5	0.1	0.1	5	
6	0.2	0.5	2.5	5.9	29	*	32	6.1	1.0	0.5	0.1	0.1	6	
7	0.2	0.6 *	1.9	6.0	21	94	35	5.8	1.0	0.5	0.1 *	0.1	7	
8	0.2	0.6	1.7	78	*	16	85	34	5.6	1.0	0.5	0.1 E	8	
9	0.2	0.6	1.5	13	118	38	39	5.3	0.9	0.4	0.1 E	0.1	9	
10	0.2	0.6	1.4	6.1	99	25	32	4.9	0.9	0.4	0.1 E	0.1	10	
11	0.2	0.6	1.3	4.4	31	18	23	4.7	0.8	0.3	0.1 E	0.1	11	
12	0.2	0.6	1.3	3.5	18	13	19	4.5	0.8	0.3	0.1 E	0.1	12	
13	0.2	0.6	1.3	3.1	48	12	16	4.3	0.7	0.3	0.1 E	0.1	13	
14	0.2	0.5	1.2	2.8	37	16	14	3.8	0.6	0.3	0.1 E	0.1	14	
15	0.2	0.5	1.2	2.7	21	19	15	3.7	0.6	0.6	0.1 E	0.1	15	
16	0.2	0.5	1.2	2.5	15	57	16	3.6	0.6	0.7	0.1 E	0.1	16	
17	0.2	0.6	1.2	2.3	11	37	16	3.4	0.6	0.5	0.1 E	0.1	17	
18	0.2	0.6	1.1	2.2	9.3	22	14	3.2	0.7	0.4	0.1 E	0.1	18	
19	0.2	0.6	1.1	2.0	9.2	14	13	3.2	0.7	0.3	0.1 E	0.1	19	
20	0.2	0.6	1.1	1.9	19	9.9	12	3.2	0.7	0.2	0.1 E	0.1	20	
21	0.3	1.8	1.1	1.8	12	20	11	3.0	0.7	0.3	0.1 E	0.1	21	
22	0.3	2.5	1.2	1.8	9.5	105	9.7	2.8	0.6	0.3	0.1 E	0.1	22	
23	0.3	1.4	1.1	1.8	8.3	28	8.8	2.5	0.6	0.1	0.1 E	0.1	23	
24	0.3	1.1	1.1	1.8	7.2	17	11	2.4	0.7	0.1	0.1 E	0.1	24	
25	0.2	1.0	1.1	1.8	6.4	198	*	15	2.1	0.6	0.1	0.1 E	0.1	25
26	0.3	0.9	1.1	1.8	5.7	55	13	2.0	0.6	0.1	0.1 E	0.1	26	
27	0.3	0.8	1.3	1.9	5.0	28	11	1.9	0.5	0.4	0.1 E	0.1	27	
28	1.5	0.7	2.0	1.6	4.6	19	10	1.8	0.5	0.4	0.1 E	0.1	28	
29	0.9	0.7	2.0	1.8	15	9.5 *	1.7	0.5	0.3	0.1 E	0.1	29		
30	0.6	0.7	1.8	1.8	14	8.9	14	1.6	0.4 *	0.5	0.1 E	0.1	30	
31	1.2		1.6	1.9	13			1.5		0.5	0.1 E		31	
MEAN	0.3	0.8	2.1	5.2	48.2	32.9	16.8	4.1	0.8	0.4	0.1	0.1	MEAN	
MAX.	1.5	2.5	13	75	421	198	39	8.7	1.4	0.7	0.3	0.1	MAX.	
MIN.	0.0	0.5	0.7	1.3	4.6	3.2	8.8	1.5	0.4	0.1	0.1	0.1	MIN.	
AC. FT	19	46	127	322	2676	2025	999	252	47	23	7 E	6	AC FT	

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— END *

MEAN DISCHARGE	DISCHARGE	MAXIMUM GAGE HT	DISCHARGE	MINIMUM GAGE HT	TOTAL ACRE FEET
9.05	925	5.32	0.0	2.26	6551

LOCATION		MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
		CFS	GAGE HT	DATE			FROM	TO		
37 42 58	120 11 20	SE34 2S 16E	1770E	5.71	12-23-64	DEC 58-DATE	1958		0.00	LOCAL

Station located on downstream side of Dogtown Road Bridge, 0.5 mile northeast of Coulterville. Tributary to Merced River. Drainage area is 17.0 square miles. Maximum discharge of record from rating curve extended above 902 cfs. Altitude of gage is 1,740 feet (from U. S. Geological Survey topographic map). There are no upstream impairments.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

YEAR	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	320	206	154	142	193	393	867	386	245	196	132	397	1
2	290	296	141	138 *	242	435	680 *	345	250	201	135	389	2
3	303 *	344	153 *	137	503	420-	584	326	265	191 *	153	393 *	3
4	336	326	278	124	1640	396	555	298	243	187	156 *	396	4
5	313	306	449	115	2120 *	385	610	299 *	216	191	159	366	5
6	271	265	525	118	2270	420	667	306	186 *	198	169	336	6
7	236	213	474	118	2270	489	791	268	172	200	173	304	7
8	203	220 *	390	121	2100	629	893	237	174	209	178	270	8
9	191	215	334	122	1820	779	1040	216	170	191	190	265	9
10	187	202	279	184	1600	958 *	1230	221	171	171	193	311	10
11	185	206	255	277	1570	1200	1220	222	183	167	176	342	11
12	173	204	252	274	1870	1230	1050	227	207	147	195	371	12
13	180	190	252	237	2050	1130	880	251	257	147	201	380	13
14	174	202	255	210	1930	1030	788	244	272	166	187	398	14
15	168	218	250	193	1860	1190	633	243 *	236	175	204	421	15
16	151	219	240	177	1860	1260	532	248	267	179	214	443	16
17	124	215	242	169	1670	1250	499	272	322	226	226	403	17
18	101	212	227	159	1400	1360	538	277	291	261	245	358	18
19	97	219	205	152	1140	1300	599	296	192	244	286	348	19
20	95	230	192	166	931	1220	599	310	161	211	393	358	20
21	111	212	184	198	784	1070	561	287	166	206	499	360	21
22	118	202	172	220	684	921	538	270	182	216	513	364	22
23	112	202	163	221	588	1020	446	296	193	227	508	357	23
24	107	193	160	232	508	1440	373	302	196	215	511	350	24
25	112	197	161	235	462	1650	365	295	176	162	520	328	25
26	121	196	158	226	378	1570	439	304	181	159	531	318	26
27	134	194	156	220	346	1600	498	318	182	156	494	319	27
28	146	182	156	216	370	1550	493	296	192	164	420	308	28
29	157	177	151	223	1700	489	280	198	151	403	355	29	
30	167	170	146	204	1410	447	242	201	143	377	371	30	
31	172		146	189		1110		224		142	380		31
MEAN	179	221	236	184	1256	1055	664	278	212	188	295	356	MEAN
MAX	336	344	525	277	2270	1750	1230	386	322	261	531	443	MAX
MIN.	95	170	141	115	193	385	365	216	161	142	132	265	MIN.
AC. FT.	11020	13160	14480	11340	69780	64890	39520	17070	12590	11540	18110	21180	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE				MINIMUM DISCHARGE				TOTAL ACRE FEET		
421	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	304700
2290	62.63	2	6	1530		84	54.75	10	19	1930	

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 18 35	120 55 45		9180a	68.05	2-26-69	MAR 37-DATE		1944	1957	-3.73	USCGS
								1957	1959	-3.77	USCGS
								1959		0.00	USCGS

Station located 30 feet below Fremont Ford Bridge, 4.5 miles west of Stevenson, 6.7 miles upstream from the Merced River. Drainage area is approximately 8,090 square miles. Flow records were published in U. S. Geological Survey report "Surface Water Records of California" prior to 1972.

a During periods of high flow some water bypasses the station through three overflow channels known as North, Middle, and South Mud Sloughs.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR		STATION NO.	STATION NAME
1975	B05170	MERCED RIVER 1/4 MILE BELOW SNELLING	

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY																																																																																		
1	125	533	613	432	369	462	1030 *	174 *	743	152	13c	291	1																																																																																		
2	126 *	537	612	431	768	450	871	187	723	121	151	334	2																																																																																		
3	126	527	667 *	439 *	523 *	415 *	717	196	84	125 *	146	477 *	3																																																																																		
4	124	577 *	650	439	543	408	575	180	902	123	152	538	4																																																																																		
5	129	633	637	435	623	507	59-	211	877	12b	176	544	5																																																																																		
6	135	643	634	441	861	506	164	253	1150	136	166	511	6																																																																																		
7	146	646	632	430	958	523	136	231	2010	152	134	476	7																																																																																		
8	182	642	632	465	945	521	27	202	2040	163	160	474	8																																																																																		
9	761	641	633	439	1020	481	1140	180	2570 *	166	152	487	9																																																																																		
10	904	637	602	430	1180	500	994	175	3570	161	133	490	10																																																																																		
11	813	631	565	427	1700	483	c77	174	4390	163	153	536	11																																																																																		
12	732	630	568	432	2020	471	873	339	4320	154	131	600	12																																																																																		
13	431	644	559	430	2190	566	680	529	4010	167	142	640	13																																																																																		
14	150	645	558	431	1970	518	b36	716	4170	185	134	651	14																																																																																		
15	159	644	557	430	1530	477	79u	760	4800	194	130 *	688	15																																																																																		
16	151	625	524	425	1520	508	761	756	4620	206	132	716	16																																																																																		
17	153	627	464	422	1270	474	747	747	3150	124	134	706	17																																																																																		
18	145	642	441	421	880	463	861	751	1720	128	152	686	18																																																																																		
19	141	635	430	428	695	459	824	753	923	125	162	689	19																																																																																		
20	144	632	425	423	675	456	803	754	750	124	178	687	20																																																																																		
21	142	641	429	423	660	470	751	779	825	129	169	701	21																																																																																		
22	133	646	427	422	684	639	546	532	a0	127	156	732	22																																																																																		
23	135	647	422	419	682	469	415	b84	840 *	121	152	763	23																																																																																		
24	135	647	421	401	674	686	366	851	b19	119	174	790	24																																																																																		
25	190	647	425	408	687	1310	275	829	781	122	187	802	25																																																																																		
26	506	628	426	411	608	1670	221	b36	766	118	171	791	26																																																																																		
27	529	632	430	418	487	1660	216	829	491	112	162	827	27																																																																																		
28	536	623	437	420	486	1670	211	b34	243	116	155	910	28																																																																																		
29	516	639	435	418	1670	209	E15	200	116	198	947	29	30	702	623	434	403	1690	195	765	253	113	225	966	30	31	550	635	435	350	1450		745	113	253				31	MEAN	318	625	520	424	973	757	654	557	1813	139	160	648	MEAN	MAX.	904	648	667	465	2190	1870	1140	684	4800	206	253	968	MAX.	MIN.	124	527	421	350	369	456	195	174	200	112	130	291	MIN.	AC. FT.	19540	37180	31980	26070	54050	46520	38910	34270	107900	8539	9860	38580	AC. FT.
30	702	623	434	403	1690	195	765	253	113	225	966	30																																																																																			
31	550	635	435	350	1450		745	113	253				31																																																																																		
MEAN	318	625	520	424	973	757	654	557	1813	139	160	648	MEAN																																																																																		
MAX.	904	648	667	465	2190	1870	1140	684	4800	206	253	968	MAX.																																																																																		
MIN.	124	527	421	350	369	456	195	174	200	112	130	291	MIN.																																																																																		
AC. FT.	19540	37180	31980	26070	54050	46520	38910	34270	107900	8539	9860	38580	AC. FT.																																																																																		

MEAN
DISCHARGE

DISCHARGE GAGE HT. MO. DAY TIME

DISCHARGE GAGE HT. MO. DAY TIME

TOTAL
ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM TO	ZERO ON GAGE	REF. DATUM	
			CFS	GAGE HT.	DATE						
37 30 06	120 27 03	NEL7 5S 14E	14500	17.10	1-7-65	NOV 58-DATE		1958	221.12	USGS	

Station located 0.2 mile downstream from Merced-Snelling highway bridge, 1.4 miles southwest of Snelling. Flow regulated by upstream reservoirs and dams. Drainage area is 1,096 square miles. Prior to November 1958, records available for a site 3.6 miles downstream. Merced Irrigation District Main Canal and several small gravity diversions are upstream from station.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	WATER YEAR	STATION NO.	STATION NAME
													1975	B05155	MERCED RIVER AT CRESSEY
1	214	610 E	659	505	457	529	1340	291 *	734	291	130 *	305	1		
2	212 *	590 E	663 *	502	1350	519	980	283	730	217	138	324	2		
3	221	600 E	723	505 *	1610	505 *	917	291	734	193 *	159	338 *	3		
4	229	591 *	773	509	772	512	674	294	888 *	181	175	505	4		
5	234	652	711	505	1200	532	663	294	852	181	175	522	5		
6	234	678	689	505	872	549	689	313	800	177	200	532	6		
7	234	678	681	509	1040 *	570	616	319	1470	172	193	509	7		
8	239	685	681	505	1070	946	780	288	1980	170	170	505	8		
9	282	674	678	536	1430	869	1190	288	2030	181	172	515	9		
10	768	667	681	519	1470	602	1230	272	2900	186	186	509	10		
11	930	659	630	499	1590	657	984	267	3750	181	170	515 *	11		
12	800	656	616	496	2100	577	950	267	4130	188	172	580	12		
13	757	652	619	496	2330	560	950	431	3760	184	166	627	13		
14	404	656	609	489	2920	1040	950	612	3540	186	170	689	14		
15	259	652	605	489	2070	670	909	726 *	3850	190	168	704	15		
16	241	648	602	482	1740	609	860	757	4120	200 *	172	761	16		
17	231	630	556	476	1710	670	840	757	3440	219	179	753	17		
18	231	627	522	469	1230	567	872 *	773	2100 *	166	195	734	18		
19	224	634 *	502	469	905	542	921	780	1180	159	231	734	19		
20	226	634	489	473 *	812	536 *	868	773	788	155	249	757	20		
21	229	641	489	466	773 *	536	856	788	719	157	246	757	21		
22	226	648	489	469	757	995	765	828	776	159	226	800	22		
23	221	659	482	466	742	761	549	860	800 *	166	207	836	23		
24	224	667	479	469	726	602	502	917	776	144	224	860	24		
25	221	667	479	463	704	934	450 E	860	738	142	221	901	25		
26	272	659	479 *	469	719	1940	370 E	864	704	140	231	925	26		
27	402 E	652	482	473	584	1890	340 E	864	652	140	212	892	27		
28	523 E	663	496	479	539	1800	310 E	840	373	134	202	972	28		
29	530 E	659	496	479	1780	310 E	824	310	114	212	1040	29			
30	542 E	678	496	479	1800	290 E	796	288	134	231	1031	30			
31	720 E	649	499	457	1780	749			132	270			31		
MEAN	366	649	582	487	1222	884	764	590	1664	172	195	681	MEAN		
MAX.	930	685	73	536	2920	1940	1340	917	4130	291	270	1040	MAX		
MIN.	212	590 E	479	457	457	505	290	267	288	114	130	305	MIN		
AC. FT.	22530	.8610	35810	29960	67880	54330	45470	36270	99000	10590	12000	40530	AC.FT.		

E — ESTIMATED
N — NO RECORD
* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	DISCHARGE	MAXIMUM				MINIMUM				TOTAL		
681	4211	4211	18.80	MO	DAY	TIME	95.8	10.57	MO	DAY	TIME	ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	I 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 25 28	120 39 47	SW 9 6S 12E	34400	22.67	12-4-50	JUL 41-DATE	APR 41-JUL 41	1950	1962	96.24	USCGS
				32.67a	12-4-50			1962		86.23	USCGS

Station located 150 feet downstream from McSwain Bridge, immediately north of Cresssey. Prior to May 20, 1960, station located 250 feet upstream from bridge. Flows regulated by upstream reservoirs and diversions. Drainage area is 1,224 square miles.

a Reflects present datum.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B0C525	MUSTANG CREEK NEAR BALlico

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.0	0.1	0.0	0.0	0.0	0.0	0.4 *	0.0 *	0.0	0.0	0.0 *	0.8	1
2	0.0	0.0	0.0 *	0.0	0.8	0.0	0.2	0.4	0.1	0.0	0.0	0.0	2
3	0.0	0.0	0.4	0.0 *	0.9 *	0.0 *	0.1	0.3	0.0	0.0 *	0.0	0.0 *	3
4	0.0	0.0 *	1.3	0.0	0.6	0.0	0.0	0.0	0.0 *	0.0	0.0	0.0	4
5	0.0	0.0	0.9	0.0	0.4	0.2	0.6	0.0	0.0	0.0	0.0	0.0	5
6	0.0	0.0	0.4	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.0	0.0	6
7	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	7
8	0.4	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.3	0.0	0.0	0.0	8
9	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.3	0.0	0.0	0.1	0.0	9
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.1	0.1	0.0	10
11	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	11
12	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.8	0.0	0.2	0.0	12
13	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	0.0	0.5	0.0	0.0	13
14	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.8	0.0	0.1	0.0	0.0	14
15	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.6	0.0 *	0.1	0.0	0.2 *	15
16	0.3	0.0	0.0	0.0	0.0	0.0	E 6.6	0.4	0.0	0.0	0.0	0.0	16
17	0.0 *	0.0	0.0	0.0	0.0	0.0	E 5.4	0.3	0.0	0.1	0.0	0.0	17
18	0.0	0.0	0.0 *	0.0	0.0	0.0	E 3.5	0.2 *	0.0	0.0 *	0.0	0.1	18
19	0.0	0.0 *	0.0	0.0	0.0	0.0	E 2.3	0.0	0.0	0.0	0.4	0.2	19
20	0.0	0.0	0.0	0.0 *	0.0	0.0	E 1.4 *	0.0	0.0	0.0	0.1	0.5	20
21	0.0	0.0	0.0	0.0	0.0 *	1.0	0.0	0.0	0.0	0.0	0.0	0.0	21
22	0.0	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.3	0.0	0.0	22
23	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.1	0.0	0.0	23
24	0.6	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0	24
25	0.3	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.1	0.0	25
26	0.1	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.6	0.3	26
27	0.0	0.0	0.0	0.1	0.0	0.0	2.8	0.0	0.3	0.0	0.4	0.0	27
28	0.2	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.2	0.0	0.0	28
29	0.3	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.4	0.0	29
30	0.1	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.1	0.0 *	0.0	30
31	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.1	31
MEAN	0.1	0.0	0.1	0.0	0.1	0.0	2.3	0.5	0.0	0.1	0.1	0.1	MEAN
MAX.	0.6	0.1	1.3	0.1	0.9	0.9	9.3	2.3	0.4	0.8	0.6	0.3	MAX.
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MIN.
AC. FT.	5	0	6	0	5	141	27	2	5	5	3	3	AC. FT.

E = ESTIMATED

NR = NO RECORD

* = DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

= E AND *

MEAN
DISCHARGE
0.3MAXIMUM
DISCHARGE
9.6MINIMUM
DISCHARGE
0TOTAL
ACRE FEET
203

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		REF. DATUM	
			CFS	GAGE HT.	DATE			FROM	TO		
37 29 58	120 39 48	NW16 5S 12E	281	5.63	1-21-69	NOV 65-DATE			1965	0.00	LOCAL

Station located at Oakdale Road Bridge, 4.0 miles northeast of Ballico. Altitude of gage is 180 feet (from U. S. Geological Survey topographic map). Drainage area is 11 square miles. Flood control structure installed one-half mile upstream in 1973.

a Discharge measurements and partial gage height records are available in DWR files.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	WATER YEAR	STATION NO.	STATION NAME
													1975	808735	ORESTIMBA CREEK BELOW HIGHWAY 33
1	23	0.6	0.1	0.0	1.0	22	16	17	24	40	17	7.5			1
2	28	0.2	1.1	0.0	0.1	34	13	16	31	46	11	13			2
3	19 *	0.1	1.5 *	0.0 *	0.0	0.6	8.7 *	17	12	25 *	11	27			3
4	8.0	0.0	1.1	0.0	0.0	1.0	6.0	16	13	29	7.5 *	6.5 *			4
5	14	0.0	0.2	1.0	0.0	46	49	16 *	10	16	7.8	4.4			5
6	10	0.8 *	0.0	0.7	0.0	69 *	123	16	11 *	33	9.8	3.0			6
7	15	0.5	0.0	0.5	0.0	45	103	19	10	17	14	4.9			7
8	19	0.2	0.0	0.4	0.0	220	78	19	9.8	17	14	2.7			8
9	5.6	0.1	0.0	1.3	0.0	237	55	18	26	16	13	1.5			9
10	0.7	0.1	0.0	1.8	41	83	26	15	11	16	17	14			10
11	0.2	0.1	0.0	1.9	40	46	8.6	21	13	19	16	36			11
12	0.1	0.1	0.0	1.7	3.8	24	15	32	24	19	16	28			12
13	0.0	0.0	0.0	1.2	6.9	67	11	9.4	11	32	15	9.0			13
14	0.0	0.0	0.0	1.7	132	140 *	16	7.2	11	53	14	44			14
15	0.0	0.0	0.0	1.1	25	78	48	9.7	11	30	14	55			15
16	0.0	0.0	0.0	0.7	3.4	68	30	12	9.8	67	12	22			16
17	0.0	0.0	0.0	0.1	0.0	110	49 *	25	17	17	15	42			17
18	0.0	0.0	0.0	1.7	0.0	69	22	27	43	26	41	19			18
19	0.0	0.0	0.0	1.9	0.0	82	13	50 *	31	74	70	0.9			19
20	0.0	0.0	0.0	1.1	0.0	52	11	5.6	26	43	69	1.9			20
21	0.0	0.0	0.0	1.6	0.0	38	14	42	19	74	57	5.4			21
22	0.4	0.0	0.0	1.4	0.0	143	17	65	32	37	46	3.3			22
23	0.9	0.0	0.0	2.2	0.0	147	19	3.0	37	18	20	25			23
24	0.6	0.0	0.0	2.2	0.2	113	22	17	16	17	39	34			24
25	0.3	0.1	0.0	1.4	0.2	57	17	16	26	17	24	16			25
26	1.4	0.1	0.0	0.5	0.1	40 *	20	19	58	17	2.7				26
27	0.5	0.4	0.0	0.3	0.4	25	18	22 *	40	26	2.9				27
28	0.2	0.8	0.0	1.3	7.9	117	33	15	35	19	6.2				28
29	1.1	0.6	0.0	0.9	90	21	16	54	18	14	52				29
30	0.6	0.3	0.0	1.1	96	17	6.6	32	32	37	13				30
31	1.3	0.0	1.4	34	4.9				18	49					31
MEAN	4.8	0.2	0.1	1.1	9.4	77.9	30.0	21.1	23.5	29.9	22.7				MEAN
MAX.	28	0.8	1.5	2.2	132	237	123	85	58	74	70	55			MAX.
MIN.	0.0	0.0	0.0	0.0	0.0	0.6	6.0	4.9	9.8	16	2.7	1.9			MIN.
AC. FT	297	10	8	66	520	4787	1784	1295	1396	1841	1396	1081			AC. FT

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW

— E AND *

MEAN	MAX.	MIN.	TOTAL
DISCHARGE	DISCHARGE	DISCHARGE	ACRE FEET
20	437	5.31	14480
20	3	10	2130

LOCATION		MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
		CFS	GAGE HT.	DATE			FROM	TO		
37 22 42	121 03 30	SE26 6S 8E	2650E	12.08	2-1-63	1959 to date				

Station located 1.0 mile south of intersection of Crows Landing Road and Highway 33 and is 400 feet east of highway. During the summer months the flows are irrigation drainage. Records are available for a station located 0.6 mile upstream operated by USBR 1948 to 1969. Also, records are available for a station located 4.5 miles downstream operated by the Department of Water Resources 1957 to 1972. Maximum discharge of record on 2-1-63 estimated as 2,650 cfs at gage height 12.08 by extending the rating curve above 1,654 cfs. Drainage area is 196 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B07200	SAN JOAQUIN RIVER AT PATTERSON BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	980	1200	1070	864	1150	1270	3270	1270	1450	1080	773	1110	1
2	991	1260	1060	850	1180	1280	2850	1180	1540	1080	746	1130	2
3	1010 *	1290	1110 *	879 *	1300	1240	2410 *	1130	1500 *	1040 *	770	1160	3
4	1040	1310	1230	839	2200	1190	2170	1170	1480	1010	796 *	1160 *	4
5	1030	1280	1410	833	2810	1220	2060	1120 *	1490	1020	794	1210	5
6	947	1260 *	1500	833	3380	1350	2010	1070	1450	1020	784	1220	6
7	965	1270	1520	841	3690 *	1500	2070	1110	1360	988	800	1220	7
8	963	1290	1470	844	3820	1710	2220	1050	1580	936	811	1180	8
9	921	1300	1400	852	3750	2030	2290	1010	1950	936	796	1200	9
10	888	1300	1330	869	3500	2170	2570	981	2130	910	830	1210	10
11	988	1290	1290	938	3440	2080	2800	1010	2450	867	860	1290	11
12	1140	1290	1260	977	3320	2150	2840	1050	3000	637	832	1360	12
13	1190	1260	1220	971	3690	2160	2660	1010	3430	831	793	1380	13
14	1190	1240	1220	957	4170	2160	2510	1030	3650	865	796	1460	14
15	1120	1260	1210	958	4420	2220	2360	1130	3660	889	817	1570	15
16	987	1250	1190	956	4340	2320	2080	1260	3750	940	823	1560	16
17	919	1250	1160	957	4000	2300	1930 *	1360	3910 *	951	924	1570	17
18	863	1250	1130	956	3620	2250	1830	1430	3940	967	1030	1550	18
19	843	1240	1070	951	3120	2190	1880	1500 *	3420	957	1100	1450	19
20	827	1230	1020	991	2540	2140	2000	1500	2550	937	1080	1440	20
21	819	1220	979	1060	2130 *	2080 *	2020	1520	1930	912	1200	1480	21
22	850	1190	948	1120	1870	2030	1910	1580	1760	880	1270	1560	22
23	860	1170	926	1150	1730	2100	1850	1570	1710	849	1240	1580	23
24	846	1160	912	1180	1610	2330	1650	1550	1600	821	1220	1580	24
25	833	1150	901	1190	1530	2480	1540	1570	1580	782	1220	1640	25
MEAN	964	1225	1124	992	2735	2209	2100	1300	2167	899	959	1425	MEAN
MAX	1190	1310	1520	1190	4420	3810	3270	1630	3940	1080	1200	1630	MAX
MIN	817	1080	870	833	1150	1190	1310	961	1170	731	746	1110	MIN
AC.FT.	59290	72910	69110	60970	151900	135800	125000	79920	129000	55280	58980	84790	AC.FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE 14 96	DISCHARGE 4450	MAXIMUM GAGE HT. 40.52	MO 2	DAY 15	TIME 1615	DISCHARGE 712	GAGE HT. 32.77	MO 7	DAY 27	TIME 1615	TOTAL ACRE FEET 1083000
----------------------------	-------------------	------------------------------	---------	-----------	--------------	------------------	-------------------	---------	-----------	--------------	-------------------------------

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE				
LATITUDE	LONGITUDE	1/4 SEC. T & R M.D.B.A.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO DH GAGE	REF. DATUM		
			CFS	GAGE HT.	DATE			FROM	TO				
37 29 40	121 04 50	SW15 5S BE	54.0	6-13-38				APR	38-SEP 66	1938	1959	0.00	USED
			50.47a	6-13-38	OCT 69-DATE					1959		0.00	USCGS
			9,600b	46.12	2-16-73					1959		3.53	USED

Station located on the Patterson-Turlock Bridge, 3.1 miles northeast of Patterson. Drainage area is 9,758 square miles.

a Reflects present datum.
 b Maximum discharge since station was rated in October 1969.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

	WATER YEAR	STATION NO.	STATION NAME
	1975	B04150	TUOLUMNE RIVER AT HICKMAN BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	1600 *	2910 *	1020	2130	3470	972	630	317	314	80	80	139	1
2	1070	3510	1180 *	1740	1790	1820	551	304 *	131	77	118	137	2
3	1050	3300	1560	3890	140	1290	542	325	109	76 *	120	228 *	3
4	862	3170	1280	3340	2700	1960	328	331	107 *	78	103 *	517	4
5	536	1300	1490	2120	2520	1960	476	329	249	79	247	939	5
6	482	781	1550	1800	2410	2280 *	417	331	286	87	226	988	6
7	451	783	1530	3710	2360 *	2160	486	333	163	73	115	1060	7
8	462	800	1540	3310 *	1840	1740	641 *	388	126	85	101	757	8
9	422	816	1500	3530	1260	1030	581	338	119	106	158	704	9
10	390	848	1550	3700	1260	1440	489	337	262	116	137	912	10
11	544	865	1560	3170	2170	2300	371	332	355	196	112	697	11
12	495	864	1610	1940	2090	916	333	329	178	156	198	1050	12
13	307	889	1580	1710	2430	704	330	389	132	92	142	995	12
14	111	910	1590	3840	2390	942	329	522	261	80	116	685	14
15	279	993	1600	3970	1920	742	330	336 *	134	111	110	646	15
16	1500	1050	1500	4100	1170	761	326	331	116	92	114	633	16
17	1490	1090	1070	4200	674	748	327	330	105	82	119	628	17
18	1480	1110	1010	3690	1230	913	330 *	331	106 *	112	197	731	18
19	1360	1110 *	1020	2380	2290	1830	330	324	107	89	277	1020	19
20	1600	1110	1250	1990 *	2450	2210 *	333	328	106	81	160	677	20
21	1670	1120	1470	4390	2510	2110	324	319	102	81	119	627	21
22	2540 *	1120	942	4290	2070	1920	325	319	103	111	160	637	22
23	2670	1110	939	4390	1150	1010	324	315	105	480	134	973	23
24	2660	1120	1660	4160	1310	1240	324	379	97	307	129	1070	24
25	2650	1120	2110	3280	2070	1820	323	317	103	250	127	1300	25
26	2530	1100	1710 *	1920	1590	825	329	309	101	272	181	1340	26
27	2380	1000	3580	1950	825	702	335	304	97	130	140	1120	27
28	2490	947	3230	4240	664	323	440	97	103	133	133	753	28
29	2670	859	2200	4300	631	325	542	94	114	132	616	616	29
30	2460	1000	1740	4320	635	320	588	87	97	132	708	708	30
31	2360		3440	4360	639	508	89	89	89	139			31
MEAN	1406	1290	1646	3286	1860	1294	381	362	149	128	144	776	MEAN
MAX.	2670	3510	3580	4390	3470	2300	641	588	355	480	277	1340	MAX.
MIN.	111	781	939	1710	674	631	320	304	87	73	80	137	MIN.
AC. FT.	86420	76770	202000	1012000	103300	79570	22680	22260	8870	7898	8878	46190	AC. FT.

E = ESTIMATED

NR = NO RECORD

* = DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

= E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MINIMUM DISCHARGE	TOTAL ACRE FEET
1058	7070	74.92	766000

LATITUDE	LONGITUDE	I 4 SEC T & R M D B & M	LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
			OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM TO	ZERO ON GAGE	REF. DATUM				
CFS	GAGE HT.	DATE	CF5	GAGE HT.	DATE									
37 38 10	120 45 14	NW34 3S 11E	59000	96.2	12-8-50	JUL 32-OCT 35					1932	-1.13	USGS	
						JAN 37-MAR 37								
						JUL 37-FEB 38								
						JUL 38-DEC 38								
						MAR 39-DATE								

Station located at Hickman-Waterford road bridge, immediately south of Waterford. Flow regulated by reservoirs and powerplants. In August 1964, this station was moved approximately one-quarter mile downstream to a point immediately upstream of the new Hickman-Waterford road bridge. Drainage area is 1,655 square miles.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

			WATER YEAR	STATION NO.	STATION NAME								
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	106	134	144	14	17	24	69 *	82	77	147 *	79	88	1
2	105	123	176 *	14	16	26	59	95	83	89	84	85	2
3	113	112	204	16 *	407	43	66	100	82	93	79	83 *	3
4	104	107	188	16	343 *	71	79	106	81 *	83	81 *	85	4
5	106	105	279	14	342	74	70	103	75	80	80	107	5
6	107	107	247	17	179	74	206	98	76	85	72	98	6
7	106	109 *	231	20 *	93	63	298	105	84	146	68	92	7
8	103 *	152	224	18	83	112	228	86	73	138	75	93	8
9	99	227	218	17	122	315	200	87	77	61	76	94	9
10	103	226	218	22	704	186 *	161	79	77	74	75	94	ID
11	111	224	240	36	282	155	122	94	85	80	76	90	11
12	106	223	242	26	110	132	109	87	86	85	87	96	12
13	112	223	236	21	119	100	102	82	91	90	78	89	13
14	105	201	232	18	827 *	629 *	94	81	77	77	72	71	14
15	95	148	227	20	279	450	85	65	70	77	70	81	15
16	127	149	222	18	98	213	80	80	103	78	81	89	16
17	110	142	220	15	66	652	89	78	170	75	77	89	17
18	103	156	218	14	55	197	100	69	78	80	89	84	18
19	100	130	215	14	48	125	95	65	86	82	156	95	19
20	94	52	214	14	43	107	98	77	96	88	122	94	20
21	103	29	102	15 *	41 *	102 *	106 *	79	96	91	111	105	21
22	282	25	30	15	47	393	104	75	101	118	106	102	22
23	390	24	25	15	42	797	101	81	143	106	91	99	23
24	397	24	32	14	38	279	96	82	160	79	91	104	24
25	390	24	20	15	35	240	92	81	84	75	102	94	25
26	223	23	17	14	34	530 *	109	77	88	71	105	91	26
27	178	23	17	13	32	246	114	68	91	82	106	102	27
28	171	24	18	14	27	139	95	68	86	82	83	96	28
29	156	24	16	14	104	103	72	79	82	82	82	90	29
30	119	28	15	13	89	90	75	75	126	82	81	90	30
31	121	15	13	79			74		77	87			31
MEAN	150	112	152	16.7	162	218	114	82.3	92.7	89.5	87.2	92.3	MEAN
MAX.	397	227	279	36	827	797	298	106	170	147	136	107	MAX.
MIN.	94	23	15	13	16	24	59	65	70	71	68	71	MIN.
AC.FT.	9213	6668	9326	1029	8983	13380	6783	5060	5516	5500	5359	5494	AC FT

MEAN DISCHARGE	DISCHARGE	MAXIMUM GAGE HT	MO	DAY	TIME	MINIMUM DISCHARGE	GAGE HT	MO	DAY	TIME	TOTAL ACRE FEET
114	1350	76.05	3	23	0030	12	67.54	1	31	1400	82310

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 39 26	120 55 19	SE24 3S 9E	7710	88.04	12-23-55	MAR 41-DATE		1941		0.00	USCGS

Station located 0.1 mile downstream from Claus Road Bridge, 4 miles east of Modesto. Tributary to Tuolumne River. June 1930 to March 1941, records available for a site 2.5 miles downstream. This is a Department of Water Resources-Modesto Irrigation District cooperative station. Drainage area is 192.3 square miles. There are no upstream impairments.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY	WATER YEAR		STATION NO.	STATION NAME			
														1975	804105	TUOLUMNE RIVER AT TUOLUMNE CITY				
1	2010	2600	1610	2520	3070	1050	1170	558	659	339	305	321	1							
2	1850	3090	1690	1700	2520	1220	1010	558	564	292 *	295	318	2							
3	1590	3310	1900	* 1980	1690	1150	832 *	567	427 *	287	315	292	3							
4	1550 *	3240	2010	2600	2210 *	1490	672	586	360	292	334 *	360 *	4							
5	1400	3010	1770	2650	2460	1810 *	662	595 *	344	308	321	582	5							
6	1240	2100 *	1980	1890	2550	1990	769	582	410	342	413	818	6							
7	1200	1680	2070	2100	2450	2170	874	592	461	336	410	943	7							
8	1170	1620	2070	2830	2420	2230	943	573	401	366	313	957	8							
9	1140	1680	2070	2800	2110	2060	1150	598	366	323	308	846	9							
10	1010	1690	2050	2890	2000	1770	1110	561	339	295	339	839	10							
11	965	1700	2080	2940	2220	2000	939	586	467	313	344	892	11							
12	1040	1690	2100	2640	2290	2300	776	579	561	382	313	801	12							
13	996	1700	2110	1830	2330	1650	709	567	491	377	352	1000	13							
14	835	1700	2110	2060	2780	1640	669	620	506	334	342	976	14							
15	630	1660	2120	2840	3070	2150	627	672	643	270	297	864	15							
16	817	1710	2130	2980	2470	1660	598 *	589 *	636	313	295	857	16							
17	1650	1740	1890	3020	1880	1840	582	570	709	303	318	769	17							
18	1740	1750	1550	3070	1450	1700	601	582	702	297 *	344	780	18							
19	1730	1790	1480	2800	1710	1660 *	601	561	630	310	617	860	19							
20	1710	1740 *	1460	1910	2100 *	2120	620	545	430	300	699	954	20							
21	1820	1660	1610	2170 *	2130	2290	614	582	344	300	503	853	21							
22	2010	1650	1490	2930	2140	2330	579	542	344	270	374	804	22							
23	2710	1620	1200	3030	1830	2670	570	542	318	313	368	835	23							
24	3070	1620	1260	3060	1320	2000	576	554	363	567	344	994	24							
25	3130	1620	1700	2970	1520	1960	620	589	313	536	328	1090	25							
26	3110	1620	1630	2520	1830	2260	579	554	285	476	323	1210	26							
27	2970	1600	1840 *	1700	1530	1840	624	533	297	479	350	1250	27							
28	2890	1540	2560	2090	1160	1490	598	521	297	385	347	1140	28							
29	2900	1480	2450	2860	1320	1320	567	620	300	344	305	954	29							
3D	2940	1450	1830	2990	1290	1290	567	695	285	328	305	835	30							
31	2870		1970	2990		1310		725		318	318		31							
MEAN		1830	1910	1860	2570	2120	1820	727	584	442	345	359	836							
MAX		3130	3310	2560	3070	3070	1170	725	709	567	699	1250								
MIN.		630	1450	1200	1700	1160	1050	567	521	285	270	295	318							
AC. FT.		112500	113600	114600	157900	117500	111900	43260	35900	26280	21210	22090	49730							

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *

MEAN DISCHARGE	DISCHARGE	MAXIMUM GAGE HT.	MINIMUM GAGE HT.
1280	3350	31.04	21.15

TOTAL ACRE FEET
926500

LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
			OF RECORD			DISCHARGE			GAGE HEIGHT ONLY			PERIOD		
			CFS	GAGE HT.	DATE				M	D	Y	FROM	TO	ZERO ON GAGE
37 36 12	121 07 50	NW 7 4S BE		46.65	12- 9-50		1930-DATE					1959	0.00	USED
				43.15a	12- 9-50							1960	0.00	USCGS
				37900b	1-27-69							1960	3.50	USED

Station located at highway bridge, 3.35 miles above mouth. Backwater at times, from the San Joaquin River, affects the stage-discharge relationship. Drainage area is 1,896 square miles. Flows regulated by upstream reservoirs and diversions.

a Reflects present datum.
 b Maximum discharge since Department of Water Resources began operation in April 1966.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY	WATER YEAR	STATION NO.	STATION NAME	
														1975	B07040	SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE	
1	3160 *	4180	2010	3150	4320	2690	4670	1780	2220	1490	1020	1640	1				
2	3130	4410	2890	2680	4210	2730	4230	1250	1860	1350 *	983	1600	2				
3	2890	4780	3060 *	2520	3450	2810	3570	1350	1750 *	1350	1320	1000	3				
4	2840	4890 *	3390	3400	3850 *	272	3120 *	1300	1510	1320	1060	1630	4				
5	2750	4770	3310	3500	3030	3160 *	2920	1270	2130 *	1340	1010 *	1530	5				
6	2550	4000	3510	3070	5750	3450	2920	1720	1690	1390	1010	2060	6				
7	2470	3330	3700	2660	3070	390	3060	1730	1620	1370	1060	2210	7				
8	2460	3190	3690	3600 *	6250	4230	3200	1660	1770	1310	1080	2280	8				
9	2400	3220	3630	3640	6000	4300	3570	1660	2140	1330	1090	2220	9				
10	2250	3250	3520	3720	5600	4310	3710	1630	2180	1250	1110	2190	10				
11	2200	3230	3450	3630	3630 *	4260	3740	1690	2540 *	1180	1160	2320 *	11				
12	2430	3230	3440	2740	5860	4790	3650	1650	2870	1200	1160	2380	12				
13	2540	3250	3410	3140	3600	4420	3500	170	2960	1210	1130	2510	13				
14	2490	3260	3300	2760	6540	4220	3320	1590	3200	1180	1110	2520	14				
15	2280	3220	3330	3590	7430	4720	3170	1770	3410	1140	1100	2560	15				
16	2180	3210	3340	3800	7000	470	2970 *	1860 *	3720	11° 0	1120	2600	16				
17	2690	3210	3160	3900	6270	4390	2690	1950	3790 *	1240	1240	2560	17				
18	2820	3200	2780	3930	5410	4500	2640	2120	4040	1240 *	1520	2570	18				
19	2800	3200	2620	3780	5180	4460 *	2610	2150	390	1300	1850	2560 *	19				
20	2720	3180 *	2520	3190	5230	4810	2690	2260	3480	1320	1900	2660	20				
21	2800	3060	2520	2800 *	4840	5000	2740	2280	2590	128	1330	2670	21				
22	2870	3040	2490	3840	4570	5100	2620	2320	2310	1160	1800	2680	22				
23	3390	2970	2190	406	4260	5280	2570	2260	2230	107	1840	2700	23				
24	3890	2940	2100	417	3640	5100	2460	2230	2150 *	1140	1610	2790	24				
25	4020	2930	2360	4160	3380	4330	2310	2260	20° 0	1250	1720	2870	25				
26	4050	2920	2470	3910	3770 *	5270	2260	2240	1950	1110	1560	3020	26				
27	3960	2880	2300 *	3230	3490	5250	2290	2340 *	1550	1130	1530	3090	27				
28	3980	2830	2990	2950	2950	5020	2280	2250	1730	1050	1510	3090	28				
29	4060	2780	3080	3900	5020	2160	2190	1680	1030	1470	3010	3010	29				
30	4220	2710	2790	4150	4990	2010	2170	1590	1030	1480	1600	2960	30				
31	4240	2480	4260	5120	5120	2200	1070	1600					31				
MEAN	3020	3380	2990	3460	5070	4370	2990	1970	2430	1220	1350	2450	MEAN				
MAX	4240	4790	3700	4260	7430	5260	4670	2320	4040	1490	1900	3090	MAX				
MIN	2180	2710	2100	2520	2950	2690	2010	1530	1510	1030	983	1600	MIN				
AC.FT	185500	200900	184000	212700	281300	268900	177800	121400	144700	75330	83070	145700	AC.FT				

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— END *

MEAN DISCHARGE	DISCHARGE	M A X I M U M	DISCHARGE	GAGE HT.	M O D Y	T I M E	DISCHARGE	GAGE HEIGHT ONLY	P E R I O D	ZERO ON GAGE	R E F D A T U M	TOTAL
2870	7470	22.40	2	15	1035		931	14.28	FROM TO	REF DATUM	ACRE FEET	

LOCATION		MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE			
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M		CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM TO	ZERO ON GAGE	REF DATUM
37 38 28	121 13 37	SW29	38 7B	45,550	36.87	2-28-69	JAN 50-MAR 52	SEP 43-DEC 49	1943 , 1959	0.00	USED
					38.31a	1-27-69	OCT 65-DATE	APR 52-SEP 65	1959	0.00	USCGS
									1959	3.41	USED

Station located at State Highway 132 Bridge, 13 miles west of Modesto, two miles upstream from mouth of the Stanislaus River. Gage height-discharge relation affected by backwater from the Stanislaus River during high flows in the Stanislaus. Flows regulated by upstream reservoirs and diversions. Drainage area is 12,400 square miles.

a This maximum gage height of record does not represent the maximum discharge of record as the station was affected by backwater from the Stanislaus River.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	WATER YEAR	STATION NO.	STATION NAME
													1975	B03175	STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE
1	35	74	1210	112	44	925	1400 *	171	6330	39 *	50 *	33	1		
2	39	69	1210 *	105	59	921	1100	880	7190 *	222	44	33	2		
3	37	63	1250	115 *	97	640	887	2140	6370	77	41	31 *	3		
4	37	67	1240	107	839 *	89	779	2530	4730 *	194	43	27	4		
5	33	96	1170	112	1970	65	769	2650	6210 *	247	41	30	5		
6	34	167	1160	121	1950	64	876	2760 *	5870	192	45	29	6		
7	37	161 *	1150	111	1850	65	925	2750	5990	455	40	26	7		
8	40 *	181	1140	132	1710	206	1080	2690	5970	722	33	28	8		
9	37	194	1140	127	1980	668	1130	2330	5650	382	32	30	9		
10	35	192	1130	121	2020	858 *	1130	1820	4500	106	35	29	10		
11	41	190	1130	115	1950	1290	1150	1810	2640 *	50	39	27	11		
12	44	158	1120	116	1920	1760	1150	2070	1740	53	33	30	12		
13	41	182	1120	112	2140	1850	1140	2430	3260	50	30	28	13		
14	30	1.0	1110	113	1990	1890	940	2230	3890	46	32	27	14		
15	36	185	1100	110	1910	1780	706	2300	3820	51	32	26	15		
16	32	179	1100	105	1900	2050	544	2290 *	3810 *	59	30	28	16		
17	33	174	1100	104	1580	1790	472	2320	3620	60	28	26	17		
18	33	171	1090	106	1880	1770	425	2350	3240	54	39	23	18		
19	32	156	1080	106	1880	1750	366	2430	1630	54	42	24	19		
20	32	157	919	100	1850	1750	345	2500	447	48	33	30	20		
21	37	150	429	107 *	1b70 *	1760	348	2490	140	47	29	34	21		
22	38	212	370	101	1660	2160	399	2440	69	48	28	32	22		
23	315	602	363	104	1560	1810	391	2400	54	47	23	32	23		
24	424	710	281	102	1860	1640	396	2340	48 *	39	22	33	24		
25	575	870	63	102	1640	1910	398	2400	46	37	23	33	25		
26	535	1200	67	99	1060	1810	393	2450	45	41	24	29	26		
27	538	1210	69	103	933	1780	391	250	48	44	35	29	27		
28	519	1210	71	101	928	1770	392	2570	51	48	39	29	28		
29	423	1210	98	102	1770	330	2600	45	47	38	29	29	29		
30	85	1210	116	79	1630	314	2710	40	43	36	34	30	30		
31	80		117	50	1440	4750			49	49	32				
MEAN	138	388	798	106	1567	1357	702	2359	2923	127	34.5	29.3	MEAN		
MAX.	575	1210	1250	132	-2140	2160	1400	4750	7190	722	50	34	MAX.		
MIN.	32	63	67	50	44	64	314	171	40	37	22	23	MIN.		
AC FT.	8515	23070	49060	6545	87020	83430	41790	145100	173900	7837	2122	1743	TOTAL		

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE 870	DISCHARGE 7550	M A X I M U M GAGE HT 13.88	M O . D A Y 6 2	T I M E 1815	DISCHARGE 20	GAGE HT 1.52	M I N I M U M NO. DAY 8 23	T I M E 1700

TOTAL
ACRE FEET
630100

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 47 18	120 45 41	SW 4 2S 11E	62000	31.8	12-23-55	JUN 28-DEC 39 APR 40-DATE				117.21	USCGS

Station located at bridge, 5.0 miles east of Oakdale. Flow regulated by reservoirs and powerplants. Drainage area is 1,020 square miles. This station is equipped with radio telemeter.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
197 ^c	B0311 ^c	STANISLAUS RIVER AT KOOTITZ RANCH

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	505	420	1090	271	180	1140	1610	70 ^e	3870	454 *	257 *	434	1
2	471	393	1110 *	261	173	1120	1450	614	4 30 *	410	310	363	2
3	439	352	1220	255	169	1050	1300	902	5 40	424	315	299	3
4	425	329	1340	249	181	913	1100 *	1930	6 20	547	340	314 *	4
5	455	316	1300	246	438	761	1300	2380	5 0	497	351	264	5
6	406	313 *	1260	240	1310	664 *	100	2550 *	2 70	607	306	296	6
7	386	336	1310	243 *	1590	614	1120	2750	1 030	574	300	361	7
8	397 *	361	1310	234	1650	651	1310	2810	610	623	352	440	8
9	375	343	1310	234	1610	627	1310	2620	6150 *	609	380	426	9
10	396	293	1300	242	1760	919	1300	2500	5 990	684	369	346	10
11	409	279	1300	233	1850 *	1010	1530	2100	5430	489	375	339	11
12	444	273	1300	228	1520	1260	1480	2130	4030	434	339	332	12
13	501	269	1300	224	1840	1620	140	2240	2650	459	354	285	13
14	542	267	1310	221	2090	1940	1420	2550	3320	405	299	270	14
15	550	291	1300	218	2000	2020	1220	2450	3960	379	319	329	15
16	433	332	1300	218	1870	1940	10 0	2460 *	4100 *	367	323	352	16
17	395	412	1300	212	1640	2110	980	2450	4140	351 *	356	304	17
18	347	420	1300	210	1630	1950	909	2510	4060	398	412	297	18
19	307	431	1290	207	1620	1900	810	2520	3740	376	468	336	19
20	299	406	1290	206	1620	1890	10 0	2620	2420	412	513	393	20
21	312	311	1180	204	1820	1 90	1 30	2790	1390	427	488	407	21
22	309	386	756	203	1810	1970	000	2730	1080	385	465	430	22
23	297	280	591	202	1810	2210	10	2620	903	372	393	385	23
24	301	424	538	199	1810	2010	124	2580	525	355	421	352	24
25	424	618	511	198	1870	1980	14n	2630	677	335	357	361	25
26	578	697	442	196	1850	2030	61	2610	541	226	284	310	26
27	561	926	363	195	1360	1930	914	2640	549	370	353	345	27
28	529	1010	326	192	1180	1850	664	2710	543	326	370	314	28
29	522	1050	307	194	1850	217	2710	545	385	356	354	354	29
30	498	1070	295	191	2020	779	270	523	386	325	356	30	30
31	434	282	187		1910			2890		386	377		31
MEAN	427	452	1004	220	1476	1542	1109	2382	3395	446	370	347	MEAN
MAX.	578	1070	1340	271	2090	2210	1610	2890	6290	513	513	440	MAX.
MIN.	578	267	282	187	169	614	779	614	523	326	264	270	MIN.
AC. FT.	26280	26890	61750	13520	82060	94510	65970	146400	202000	27440	22770	20660	AC. FT.

E — ESTIMATED
N# — NO RECORD
* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	DISCHARGE	MAXIMUM GAGE HT. MO. DAY TIME	DISCHARGE	GAGE HT. MO. DAY TIME	MINIMUM DISCHARGE	GAGE HT. MO. DAY TIME
1092	6370	44.93 6 4 1015	167	27.08 2 3 1600		

TOTAL ACRE FEET	790600
--------------------	--------

LATITUDE	LONGITUDE	1.4 SEC. T & R M D B A M	LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
			OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM			
			CFS	GAGE HT.	DATE			FROM	TO					
37 41 57	121 10 08	SW 2 3S 7E		50.5a	12-24-55	OCT 62-DATE	MAR 50-SEP 62	1950 1963 1970	1962 1969 0.00	-0.63 0.37 0.00	USCGS USCGS USCGS			

Station located on left bank 9.35 miles upstream from mouth, 0.6 mile northwest of Bacon and Gates Road Junction, 3.7 miles southwest of Ripon. It is possible that backwater from San Joaquin River could affect the stage-discharge relationship. Flow regulated by upstream reservoirs and diversions. Drainage area is 1,094 square miles.

a Water bypasses station by overflowing flood plain on right bank and discharge is not computed. Overflowing occurs at approximately 45 feet gage height.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	B07020	SAN JOAQUIN RIVER NEAR VERNALIS

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	3760	4710	3860	3580	4290	3830	6420	2510	4980	2030	1430	1930	1
2	3830	4830	4000	3480	4250	3750	5800	2360	5860	1930	1400	1790	2
3	3560	5140	4200	2850	3540 *	3850	5060	2330	6550	1860	1430	1770	3
4	3400	5240	4650	3680	3610	3580	4450	3090	7350	1930	1450	1710	4
5	3330	5180	4640 *	3890	4790	3750	4100	3660	7570	1970	1420	1890	5
6	3120	4580	4740	3550	6080	3930	3990	3690	7070	2040	1350	2130	6
7	2990	3860	5010	2920	6910	4270	4140	3910	7350	2030	1400	2380	7
8	2970	3680	5070	3770	7250	4640	4320	4060	7560	1910	1440	2500	8
9	2920 *	3670	5030	3880	7200	4860	4880	4000	7880	2020	1470	2460	9
10	2770	3660	4940	3940	6870	5000	5110	3960	8100	1980	1490	2340	10
11	2600	3610	4890	4050	6950	5060	5100	3670	8000	1740	1550	2470	11
12	2860	3600 *	4860	4060	7140	5610	4960	3570	7510	1680	1520	2570	12
13	3040	3610	4840	3590	7110	5800	4740	3440	6030	1680	1440	2770	13
14	3040	3640	4830	2950	7900	5730	4560	3690	6120	1630	1400	2800	14
15	2940	3590	4840	3740	8820	6350	4240	3840	7160	1560	1350	2800	15
16	2690	3620	4840	4020	8670	6300	3880	3970	7740	1550	1340	2910	16
17	3020	3680	4730	4120	7950	6230	3470	4070	7840	1650	1480	2810	17
18	3220	3670	4350	4160	7120	6380	3340	4240	8040	1670	1850	2760	18
19	3140	3670	4130	4080	6710	6070	3220	4340	7810	1760	2270	2790	19
20	3060	3660	4010	3610	6830	6330	3240	4350	6600	1780	2420	2940	20
21	3080	3480	3940	2990	6610	6590	3310	4550	4380	1760	2300	2980	21
22	3140	3400	3690	3940	6300	6620	3190	4650	3480	1620	2230	2980	22
23	3560	3340	3130	4230	6010	7070	3070	4550	3130	1460	2220	2950	23
24	4120	3340	2870	4350	5410	7040	2970	4470	2860	1470	2200	3010	24
25	4380	3500	3080	4340	5030	6530	2890	4530	2700	1630	2090	3060	25
26	4560	3600	3250	4140	5460	6930	2900	4580	2440	1490	1760	3210	26
27	4570	3740	2880	3560	4990	6740	2950	4540	2330	1550	1710	3250	27
28	4510	3830	3560	3000	4240	6740	2970	4590	2290	1500	1710	3250	28
29	4620	3830	3740	3880	6630	2810	4580	2260	1440	1640	3210	29	
30	4770	3760	3470	4150	6820	2630	4630	2240	1460	1620	3150	30	
31	4820	2930	4270		6920		4700		1490	1740		21	
MEAN	3497	3891	4162	3766	6212	5685	3957	3972	5708	1718	1680	2652	MEAN
MAX.	440	5240	510	4550	8820	7070	6420	4700	8100	2040	2420	3250	MAX
MIN.	2600	3340	2870	2850	3610	3580	2630	2330	2240	1440	1340	1710	MIN
AC.FT.	215000	231500	255900	231600	345000	349500	235500	244200	339600	105700	103300	157800	AC.FT

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR
** — OBSERVATION OF NO FLOW

— E AND *

MEAN	MAXIMUM				MINIMUM				TOTAL		
DISCHARGE	DISCHARGE	GAGE HT.	MO	DAY	TIME	DISCHARGE	GAGE HT.	MO	DAY	TIME	ACRE FEET
3888	9080	18.60	2	15	1845	1340	10.24	8	16	1815	281500

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC T & R M.D.B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 40 34	121 15 55		70000	27.75	12-9-50	JUL 22-DEC 23		1931	1959	8.4	USED
				32.81a	12-9-50	JAN 24-FEB 25					
			52600	34.55	1-27-69	JUN 25-OCT 28		1931	1959	5.06	USCGS
						MAY 29-DATE		1959		0.00	USCGS

Station located on left bank 20 feet downstream from the Durham Ferry Highway Bridge, 2.4 miles downstream from the Stanislaus River 3.4 miles northeast of Vernalis. Drainage area is approximately 13,540 square miles. Natural flow of stream affected by storage reservoirs, power developments, groundwater withdrawals and diversions for irrigation. Low flows consist mainly of return flow from irrigation. This station is operated under the Federal-State Cooperative Program. Equipped with DNR radio telemeter. The records are furnished by the U. S. Geological Survey.

a Reflects present datum. The gage height of 32.81 feet does not represent the maximum discharge of 79,000 cfs as water was bypassing the station through levee breaks upstream from station.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR		STATION NO.	STATION NAME											
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY	
1	.030	.301	.081	.217	.392 E	1.31	1.85	2.85	1.31	.435	.301	.100	1	
2	.100	.217	.081	.236	1.05	1.14	1.85	3.42	1.31	.483	.217	.081	2	
3	.081	.178	.214	.236	.347	.966	1.85	3.86	1.31	.463	.217	.061	3	
4	.100	.158	.386	.236	.301	.968	1.71	3.42	1.23	.436	.236 *	.061	4	
5	.120	.139	.574	.236	.342	2.42	1.40	2.55 *	1.14	.392	.217	.045 *	5	
6	.100	.120	.301 *	.665	.392	3.64	1.46	2.71	1.05	.392	.236	.045	6	
7	.045 *	.120	.236	.710	.528	3.66 *	1.46	2.99	1.05	.347 *	.217	.061	7	
8	.120	.120	.217 *	1.23	1.05	4.94	1.46	3.86	1.05	.301	.178	.061	8	
9	.081	.120	.198	.665	.286	2.26	1.40	4.29	.968 *	.301	.178	.081	9	
10	.100	.120	.217	.528	2.14	1.85	1.40	4.73	.968	.301	.198	.061	10	
11	.100	.120	.198	.438	1.71	1.48	1.46	4.73	.96	.301	.178	.061	11	
12	.045	.120	.198	.392	1.31	1.40	1.49	5.16	.96	.301	.176	.061	12	
13	.045	.100	.198	.392	3.21	1.31	1.71	5.47	.78	.301	.178	.081	13	
14	.045	.100	.178	.347	2.00	E	1.23 E	2.14 *	5.47	.78	.217	.178	.100	14
15	.045	.100	.178	.347	1.31	E	1.31	1.71	4.94	.78	.256	.178	.100	15
16	.015	.100	.198	.347	1.14	E	1.31 E	1.48	4.51	.796	.392	.178	.100	16
17	.030	.178	.198	.347	.968	E	1.14 E	1.40	4.08	.796	.436	.178	.081	17
18	.061	.217	.198	.347	.710	#	1.23 E	1.40	3.86	.882	.392	.198	.061	18
19	.081	.217	.198	.347	.665	1.40	1.40	3.64 *	.968	.347	.217	.061	19	
20	.081	.217	.198	.347	.710	1.85 E	1.85	3.21	.968 *	.347	.217	.045	20	
21	.061	.528	.217	.347	.619	1.71 E	2.28	2.85	.882	.347	.178	.061	21	
22	.045	.528	.217	.347	.619	1.57 E	2.42	2.71	.796	.301	.158	.045	22	
23	.061	.178	.217	.347	.619	1.40 E	2.42	2.42	.665	.301	.158	.030	23	
24	.061	.139	.198	.347	.665	1.71 E	3.86	2.42	.619	.301	.158	.061	24	
25	.081	.139	.198	.347	.665	5.47 E	5.47	2.28	.619	.256	.139	.030	25	
26	.120	.120	.198	.301	.710	2.85 E	2.71	2.14	.619	.236	.139	.061	26	
27	.139	.120	.198	.256	.968	2.56 E	2.56	1.85	.574	.236	.120	.100	27	
28	.392	.100	.256	.236	1.23	2.28 E	2.71	1.85	.619	.301	.100	.081	28	
29	.217	.100	.217	.256	.236	2.28 E	2.85	1.71	.526	.256	.100	.045	29	
30	.158	.081	.217	.236	.236	2.14 E	2.99	1.48	.483	.301	.100	.030	30	
31	.217	.217	.217 *	.256	.200 #			1.40	.301	.100				31
MEAN	.096	.170	.393	.383	1.08	2.03	2.07	3.33	.884	.332	.178	.066	MEAN	
MAX	.392	.528	.386	1.23	3.86	5.47 E	5.47	5.47	1.31	.483	.301	.100	MAX	
MIN	.015	.081	.081	.217	.301	.966	1.31	1.40	.483	.217	.100	.030	MIN	
AC. FT.	.9.90	10.1	24.2	23.5	60.0	125 E	123	205	52.6	20.4	11.0		AC. FT.	

E — ESTIMATED
NE — NO RECORD
* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE				PERIOD OF RECORD				DATUM OF GAGE				
	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HEIGHT ONLY	MO	DAY	TIME	PERIOD	ZERO ON GAGE	REF. DATUM
.917	19.0	1.83	4	24	2215	0	0.99	10	16		FROM	TO	

TOTAL ACRE FEET
664.2

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE				
LATITUDE	LONGITUDE	1 4 SEC T. & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	MO	DAY	TIME	PERIOD	ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE								
37 5 12	119 20 35	SW3 10 24				11-2-73					1973		Assumed

Station located 4.0 miles south of Shaver Lake on Highway 168 and 1.5 miles west on private road.
Station operated under contract with Fresno County. Due to the importance of extreme low flows to contractor, the Department of Water Resources criteria of rounding values were not adhered to.
Drainage area is 1.3 square miles.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME											
1975	B71406	MUSICK CREEK #1 NEAR SHAVER LAKE											
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	.013	.481	.157	.430	.797	2.59	3.78	9.64	4.88	1.80	.583	.224	1
2	.062	.224	.157	.430	2.59	2.20	3.78	10.6	4.33	1.69	.532	.224	2
3	.078	.141	10.1	.430	.635	2.00	4.61	11.0	4.33	1.69	.532	.378	3
4	.047	.532	10.1	.430	.635	1.80	4.06	10.6	3.58	1.69	.532 *	.157	4
5	.047	.532	1.69	.430	.797	6.32	3.19	8.54 *	3.58	1.58	.430	.157 *	5
6	.047	.157	1.02 *	2.00	.909	6.52	3.78	8.10	3.39	1.47	.430	.157	6
7	.047 *	.224	.686	1.47	1.02	8.54 *	3.39	8.76	3.19	1.35 *	.430	.157	7
8	.110	.378 *	.583	2.40	1.69	11.2	3.19	10.3	3.19	1.24	.378	.173	8
9	.094	.327	.532	1.58	7.69	6.32	3.39	11.8	3.19 *	1.24	.378	.276	9
10	.078	.327	.481	1.24	5.58	5.06	3.39	12.3	3.39	1.24	.378	.276	10
11	.062	.276	.481	1.02	5.06 E	3.78	2.90	12.8	3.19	1.13	.327	.224	11
12	.062	.224	.481	.909	4.06 E	3.58	3.78	13.6	2.79	1.13	.327	.224	12
13	.078	.224	.481	.797	6.52 E	2.59	4.33	13.8	2.90	1.02	.327	.173	13
14	.094	.224	.481	.797	4.33 E	2.79	4.88 *	13.3	2.79	1.02	.327	.157	14
15	.047	.224	.430	.797	3.39 E	2.59	4.06	12.3	2.59	1.02	.276	.157	15
16	.031	.173	.430	.797	2.79 E	2.59	3.19	11.8	2.59	1.13	.276	.141	16
17	.013	.224	.430	.797	2.20 E	2.20	2.90	10.8	2.59	1.24	.276	.141	17
18	.015	.224	.378	.797	1.69 *	2.20	2.79	10.6	2.40	1.24	.327	.141	18
19	.110	.276	.430	.797	1.58	2.59	2.90	10.1 *	2.40	1.13	.583	.141	19
20	.062	.276	.430	.797	1.47	3.78	4.61	9.42	2.20 *	1.02	.481	.126	20
21	.047	2.55	.430	.797	1.35	3.19	5.76	8.54	2.20	.909	.430	.110	21
22	.047	1.24	.430	.797	1.24	2.90	5.93	8.10	2.00	.797	.430	.094	22
23	.047	.481	.378	.797	1.35	2.20	6.52	7.69	1.80	.797	.378	.110	23
24	.047	.378	.327	.686	1.35	3.39	11.1	7.49	1.80	.797	.378	.110	24
25	.047	.327	.378	.686	1.47	13.3	14.8	7.10	2.00	.686	.327	.110	25
26	.062	.276	.378	.635	1.47	6.52	8.76	6.91	2.00	.635	.327	.110	26
27	.078	.224	.430	.583	1.80	4.61	7.69	6.32	2.00	.635	.430	.110	27
28	3.640	.224	.481	.532	2.20	3.78	8.32	5.76	2.40	.635	.378	.126	28
29	.635	.224	.481	.481	4.81	3.58	8.76	5.41	2.00	.635	.327	.126	29
30	.378	.173	.481	.481	4.06	9.42	5.23	1.69	.635	.276	.110	.276	30
31	.909	.430	.430 *	.481	4.06 *	5.23			.635	.276			31
MEAN	.23	.39	1.12	.84	2.42	4.30	4.56	9.48	2.78	1.09	.39	.16	MEAN
MAX	3.64	2.55	10.1	2.40	7.69	13.3	14.8	13.8	4.88	1.80	.583	.378	MAX
MIN.	.013	.141	.157	.430	.635	1.80	2.90	5.23	1.69	.635	.276	.094	MIN.
AC. FT.	14.2	23.3	68.6	51.8	134 E	264	271	583	165	67.2	24.0	9.8	AC. FT.

E = ESTIMATED

NR = NO RECORD

* = DISCHARGE MEASUREMENT OR
DETERMINATION OF NO FLOW

** = E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MINIMUM DISCHARGE	TOTAL ACRE FEET
DISCHARGE	GAGE HT.	GAGE HT.	ACRE FEET
2.32	33.9	1.78	1676.7
	12	3	
	2300		
		10	
		1	

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T & R M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FRDM TO	ZERO ON GAGE	REF. OATUM	
			CFS	GAGE HT.	DATE						
37 5 34	119 19 55	SW2 10 24				11-2-73		1973			
Station located 4.0 miles south of Shaver Lake on Highway 168 and 2.5 miles west on private road. Station operated under contract with Fresno County. Due to the importance of extreme low flows to contractor, the Department of Water Resources criteria of rounding values were not adhered to. Drainage area is 1.9 square miles.											

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	C01120	KINGS RIVER, SOUTH FORK, BELOW EMPIRE WEIR #2

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0			0		0		0	86	0	21	21	1
2	0			0		0		0	186	0	21	21	2
3	0			0		0		0	206	0	21	21	3
4	0			0		0		0	209	0	7	21	4
5	0			0		0		0	213	0	0	21	5
6	0			15		0		0	192	0	0	13	6
7	0			29		0		0	206	0	54	0	7
8	0			41		0		0	220	0	146	20	8
9	0			50		0		0	222	0	152	45	9
10	0			50		0		0	213	0	149	56	10
11	0			50		0		0	102	13	173	56	11
12	0			47		0		0	19	21	185	56	12
13	0	N	N	50	N	0	N	0	6	19	165	56	13
14	7	O	O	52	O	0	O	0	0	6	128	56	14
15	15			37		0		0	0	27	134	56	15
16	15	F	F	19	F	0	F	0	23	37	91	56	16
17	15	L	L	19	L	0	L	10	54	78	0	66	17
18	5	O	O	21	O	0	O	20	54	119	19	73	18
19	0	W	W	19	W	0	W	14	41	122	21	70	19
20	0			34		0		0	31	122	21	59	20
21	0			41		0		0	11	125	21	43	21
22	0			41		0		0	0	131	13	40	22
23	0			41		0		0	0	131	0	37	23
24	0			41		0		0	0	83	41	37	24
25	0			29		0		0	0	0	97	29	25
26	0			0		0		0	0	0	88	28	26
27	0			0		0		0	0	0	66	28	27
28	0			0		0		0	0	0	24	26	28
29	0			0		13		0	0	14	26	27	29
30	0			0		15		0	10	21	22	28	30
31	0			0		0		0	0	21	22	28	31
MEAN MAX. MIN. AC. FT.	2 15 0 113			23 52 0 1440		1 15 0 56		1 20 0 87	77 222 0 4570	35 131 0 2162	62 185 0 3824	39 73 0 2313	MEAN MAX. MIN. AC. FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN
DISCHARGE
20.1MAXIMUM
DISCHARGE
222MINIMUM
DISCHARGE
0TOTAL
ACRE FEET
14565

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T & R. M O B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
36 10 48	119 50 00	NW20 20S 20E	4102a		6-12-69	1937-DATE					

Station located 1.0 mile southwest of Stratford. South Fork Kings River, composed of Kings River water, is a tributary to the Tulare Lake area. Records furnished by Kings River Water Association.

a Maximum discharge since 1950.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO	STATION NAME
1975	C02602	CROSS CREEK BELOW LAKELAND CANAL NO. 2

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
MEAN MAX. MIN. AC. FT.													MEAN MAX. MIN. AC. FT.

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *

MEAN DISCHARGE	MAXIMUM				MINIMUM				TOTAL ACRE FEET
DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC T. & R M.D.B&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
36 12 42	119 34 05	NE 10 20S 22E				1921-DATE					

Station located downstream from Cross Creek Weir, 4 miles east of Guernsey. Tributary to Tulare Lake area. At times the flow is a combination of water from Kaweah River, Kings River, and Cottonwood Creek. Records are computed by the use of weir measurements taken at daily intervals and are furnished by the Corcoran Irrigation District.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

	WATER YEAR	STATION NO.	STATION NAME										
	1975	C03913	FRIANT-KERN CANAL DELIVERY TO PORTER SLOUGH										
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0				0	5	5	14	12	15	11	5	1
2	0				0	5	4	14	12	16	9	5	2
3	0				0	5	4	14	12	0	9	5	3
4	0				0	5	4	14	17	5	9	11	4
5	0				0	11	4	14	18	5	9	11	5
6	0				0	11	4	15	16	5	12	11	6
7	0				0	11	5	14	13	5	12	11	7
8	0				0	11	5	14	13	8	12	11	8
9	0				0	11	5	14	13	8	12	10	9
10	0				0	14	8	15	11	15	12	10	10
11	0				0	14	6	15	11	16	12	4	11
12	0				0	11	7	12	11	11	9	4	12
13	0	N	N	N	0	12	6	12	16	11	10	4	13
14	5	O	O	O	0	11	6	12	16	11	10	4	14
15	5				0	12	6	12	16	12	10	7	15
16	5	F	F	F	0	11	6	13	16	12	10	7	16
17	5	L	L	L	0	7	6	13	16	12	10	7	17
18	5	O	O	O	0	7	8	13	16	12	10	7	18
19	5	W	W	W	0	7	7	13	16	8	5	7	19
20	5.5				0	6	7	13	16	8	5	6	20
21	0				0	6	7	13	16	8	5	5	21
22	0				0	6	7	13	16	5	8	5	22
23	0				0	3	7	13	16	5	11	6	23
24	0				0	3	10	14	16	5	11	6	24
25	0				0	2.5	8	10	16	5	11	5	25
26	0				0	0	8	10	16	9	11	5	26
27	0				6	0	8	11	15	8	11	5	27
28	0				5	0	8	11	15	15	11	5	28
29	0				0	17	11	15	15	5	5	29	
30	0				0	14	11	15	16	5	5	30	
31	0				0		12.5		11	5	5	31	
MEAN MAX.	1					7	7	13	15	10	9	7	MEAN MAX.
MAX.	5.5				6	14	17	15	18	16	12	11	MAX.
MIN.	0				0	0	4	10	11	0	5	4	MIN.
AC. FT	70				22	412	413	792	879	589	579	395	AC. FT

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
 # — E AND *

MEAN DISCHARGE	MAXIMUM				MINIMUM				TOTAL ACRE FEET
5.7	DISCHARGE	GAGE HT.	MO.	DAY	DISCHARGE	GAGE HT	MO	DAY	4151

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	14 SEC T & R MDB&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
36 05 00	119 04 50	SW20 21S 27E						MAY 50-DATE			
These flows are deliveries from Friant-Kern Canal into Porter Slough. Delivery is at the intersection of Porter Slough with the Friant-Kern Canal approximately 4 miles west of Porterville. Records furnished by U. S. Bureau of Reclamation.											

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME											
1975	C03923	FRIANT-KERN CANAL DELIVERY TO TULE RIVER											
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1					0		0	99	101				1
2					0		0	101	97				2
3					0		0	100	101				3
4					0		0	100	101				4
5					0		0	100	101				5
6					0		0	100	101				6
7					0		0	100	101				7
8					0		0	100	101				8
9					0		0	100	101				9
10					0		0	100	100				10
11					0		0	100	100				11
12					80		0	100	100				12
13	N	N	N	N	79		N	0	99	100	N	N	13
14	O	O	O	O	93		O	0	99	100	O	O	14
15					94			150	100	100			15
16	F	F	F	F	96		F	150	100	100	F	F	16
17	L	L	L	L	95		L	150	100	100	L	L	17
18	O	O	O	O	39.5		O	137	100	100	O	O	18
19	W	W	W	W	0		W	101	100	100.5	W	W	19
20					0			101	100	0			20
21					0			101	100	0			21
22					0			101	101	0			22
23					0			100	101	0			23
24					0			100	101	0			24
25					0			100	101	0			25
26					0			100	101	0			26
27					0			100	101	0			27
28					0			100	101	0			28
29					0			100	101	0			29
30					0			100	101	0			30
31									100.5				31
MEAN					19			60	100	64			MEAN
MAX					96			150	101	101			MAX.
MIN					0			0	99	0			MIN.
AC. FT.					1143			3552	6164	3780			AC. FT.

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *

MEAN DISCHARGE	MAXIMUM				MINIMUM				TOTAL	
DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
20.2	154	1.84	4	15	0800	0				14639

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T & R. M.D.B.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
36 04 25	119 05 15	NW29 21S 27E				MAY 50-DATE					

These flows are deliveries from Friant-Kern Canal into Tule River. Point of delivery is located on the Tule River approximately 4 miles west of Porterville where Friant-Kern Canal crosses the Tule River. Records furnished by U. S. Bureau of Reclamation.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR		STATION NO.	STATION NAME
1975	C03169	TULE RIVER BELOW PORTERVILLE	

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1			0.0	0.0	0.0		0.0	97.0 b	87.0 b		0.0		1
2			0.0	0.0	0.0		0.0	97.0 b	83.0 b		0.0		2
3			0.0	0.0	0.0		0.0	93.0 b	87.0 b		0.0		3
4			0.0	0.0	0.0		0.0	93.0 b	80.0 b		0.0		4
5			0.0	0.0	0.0		0.0	90.0 b	80.0 b		1.2		5
6			0.0	0.0	0.0		0.0	87.0 b	78.0 b		122.6 *		6
7			0.0	0.0	0.0		0.0	83.0 b	78.0 b		174.0		7
8			0.0	0.0	0.0		0.0	83.0 b	80.0 b		152.0		8
9			0.0	0.0	0.0		0.0	83.0 b	80.0 b		144.0		9
10			7.2 E	0.0	0.0		0.0	83.0 b	87.0 b		152.0		10
11			49.0 E	0.0	0.0		0.0	87.0 b	83.0 b		148.0		11
12			54.0 *	0.0	63.2 b		0.0	87.0 b	90.0 b		144.0 *		12
13	N	N	49.0 *	0.0	100.0 a	N	0.0	90.0 b	93.0 b	N	148.0 *	N	13
14	O	O	0.0	87.0 a	0.0	O	0.0	93.0 b	90.0 b	O	152.0	O	14
15			0.0	52.0	60.0 a		65.1 b	93.0 b	83.0 b		132.0		15
16	F	F	0.0	54.0	67.0 a	F	157.0 b	100.0 b	80.0 b	F	123.0	F	16
17	L	L	0.0	54.0	70.0 a	L	165.0 b	103.0 b	80.0 b	L	111.0	L	17
18	O	O	0.0	54.0	40.0 b	O	165.0 b	100.0 b	80.0 b	O	107.0	O	18
19	W	W	0.0	54.0	0.0	W	132.0 b	90.0 b	80.0 b	W	21.7	W	19
20			0.0	54.0 *	0.0		111.0 b	83.0 b	30.5 b		0.0		20
21			0.0	58.0	0.0		107.0 b	90.0 b	0.0		0.0		21
22			0.0	58.0	0.0		100.0 b	83.0 b	0.0		0.0		22
23			0.0	30.0	0.0		100.0 b	83.0 b	0.0		0.0		23
24			0.0	0.0	0.0		97.0 b	87.0 b	0.0		0.0		24
25			0.0	0.0	0.0		93.0 b	87.0 b	0.0		0.0		25
26			0.0	0.0	0.0		97.0 b	90.0 b	0.0		0.0		26
27			0.0	0.0	0.0		100.0 b	90.0 b	0.0		0.0		27
28			0.0	0.0	0.0		97.0 b	93.0 b	0.0		0.0		28
29			0.0	0.0	0.0		90.0 b	93.0 b	0.0		0.0		29
30			0.0	0.0	0.0		93.0 b	90.0 b	0.0		0.0		30
31			0.0	0.0	0.0		90.0 b*	90.0 b*	0.0		0.0		31
MEAN			5.1	15.4	17.4		59.0	90.0	53.6		59.1		MEAN
MAX			54.0	58.0	100.0		165.0	103.0	93.0		174.0		MAX
MIN.			0.0	0.0	0.0		0.0	83.0	0.0		0.0		MIN.
AC. FT.			316	946	966		3509	5536	3192		3635		AC. FT.

a - Includes CVP water

b - All CVP water

E - ESTIMATED

NR - NO RECORD

* - DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

- E AND *

MEAN DISCHARGE 25.0	DISCHARGE 174.0	M A X I M U M	DISCHARGE	GAGE HT	MO	DAY	TIME	M I N I M U M	DISCHARGE	GAGE HT	MO	DAY	TIME	TOTAL ACRE FEET 18100

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD			REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
36 04 40	119 06 22	NW30 21S 27E	8850	9.27	12-7-66	FEB 57-DATE		1957	1959	0.00	LOCAL
								1959		-3.48	LOCAL

Station located 330 feet upstream from Rockford Road Bridge, 5.1 miles west of Porterville. Flows regulated by Success Reservoir and spill from Friant-Kern Canal. Altitude of gage is approximately 400 feet (from U. S. Geological Survey topographic map). Flows include Central Valley Project releases from Friant-Kern Canal to Tule River. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

					WATER YEAR	STATION NO.	STATION NAME						
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	7.8					0.0	0.0	14.2	19.6	18.9	16.5	14.5	1
2	8.4					0.0	0.0	14.2	20.3	18.6	17.2	14.5	2
3	8.1					2.3	0.0	14.8	20.6	17.2	18.2	14.2	3
4	7.5					4.4 *	0.0	15.2	20.3	16.2	18.6	14.2	4
5	7.2					4.7	0.0	15.2	19.6	17.2	18.9	13.9	5
6	7.2					4.2	0.0	14.8	19.6	17.2	19.3	13.2	6
7	7.2					5.7	0.0	14.2	18.9	18.2	18.9	12.9	7
8	7.2					7.2	0.0	13.9	18.9	18.2	18.9	12.2 *	8
9	7.2					7.8	0.0	13.5	18.6	18.9	18.9	11.9	9
10	6.8					7.2	0.0	13.2	18.6	19.6	19.3	11.6	10
11	6.5					8.1	0.0	12.9	18.6	20.0	19.3	11.0	11
12	6.0			N	N	11.3	0.0	12.5 *	19.3	20.6	18.9	10.7	12
13	6.2			O	O	13.2	0.0	16.2	20.0	21.6	18.9	10.0	13
14	6.2			O	O	13.5 *	4.2 E	18.2	19.6	23.0	18.6	9.0	14
15	6.5					13.2	8.7 E	18.6	19.3	23.8	15.8	8.7	15
16	6.5	F	F	F	F	12.9	9.3	18.6	18.9 *	23.8	14.8	8.4	16
17	6.8	L	L	L	L	12.5	10.0	18.9	18.9	24.2	14.5	9.0	17
18	6.8	O	O	O	O	11.9	10.0	19.6	18.9	24.5	14.8	11.0	18
19	7.2	W	W	W	W	3.6	10.0	19.6 *	18.9	22.0	13.5	12.2	19
20	6.8					0.0	9.6	19.3 E	18.2	19.6	12.5	12.5	20
21	6.5					0.0	9.3	18.9 E	18.2	18.2 *	12.5	13.5	21
22	6.8					0.0	9.0	18.6	17.8	18.2	12.5	13.5 *	22
23	6.0					0.0	10.4 E	17.8	17.8	17.5	12.5	15.2	23
24	9.3					0.0	11.0 E	17.8	18.2	17.5	12.2	17.5	24
25	8.4					0.0	11.3 E	17.8	18.2	17.5	12.2 *	15.2	25
26	7.2					0.0	11.3	18.2	17.2	17.8	12.5	10.4	26
27	7.2					0.0	11.3	18.6	15.8	17.8	12.5	11.6	27
28	4.9					0.0	11.6	18.6	18.9	18.2 *	12.5	13.5	28
29	0.0					0.0	13.5	18.9	18.9	18.2	13.5	14.2 *	29
3D	0.0					0.0	14.2	19.3 *	18.6 *	18.2	14.2	13.5	30
31	0.0					0.0	19.3		17.5	14.5		13.5	31
MEAN	6.3					4.6	5.8	16.6	18.8	19.4	15.7	12.5	MEAN
MAX.	9.3					13.5	14.2	19.6	20.6	24.5	19.3	17.5	MAX
MIN.	0.0					0.0	0.0	12.5	15.8	16.2	12.2	8.4	MIN
AC. FT.	390					285	346	1034	1121	1190	968	741	AC. FT

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *

MEAN DISCHARGE 8.4	MAXIMUM DISCHARGE 24.5	MAXIMUM GAGE HT. 1.10	MO.	DAY	TIME Mean Daily	MINIMUM DISCHARGE 0.0	GAGE HT. 0.0	MO.	DAY	TIME	TOTAL ACRE FEET 6075
--------------------------	------------------------------	-----------------------------	-----	-----	--------------------	-----------------------------	-----------------	-----	-----	------	----------------------------

LOCATION			MAXIMUM DISCHARGE				PERIOD OF RECORD				DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M D B & M.	OF RECORD			DISCHARGE	GAGE HEIGHT DHLY	PERIOD			ZERO ON GAGE	REF. DATUM		
			CFS	GAGE HT.	DATE			FROM	TO					
36 02 48	118 56 54	NW 4 22S 28E				AUG 42-DATE				OCT 62	0.00 -2.00	LOCAL LOCAL		

Station located 3.9 miles southeast of Porterville approximately 2,600 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

	WATER YEAR	STATION NO.	STATION NAME
	1975	C03182	PORTER SLOUGH AT PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	14.1				0.0		0.0	21.4	22.4	22.8	20.0	0.0	1
2	18.2				0.0		0.0	21.4	21.0 *	23.4	15.4	0.0	2
3	17.4				0.0		0.0	21.4	16.4	7.6	12.1	0.0	3
4	18.2				0.0		0.0	8.9	13.8	0.0	13.8 *	0.0	4
5	17.4				0.0		0.0	0.0	13.0	0.0	9.2	0.0	5
6	17.8				0.0		0.0	0.0	16.4	0.0	0.0	0.0	6
7	20.4				0.0		0.0	0.0	18.6	0.0	0.0	0.0	7
8	21.0				0.0		10.0	0.0	17.8	0.0	0.0	0.0	8
9	20.4				0.0		16.8	0.0	12.1	9.8	0.0	0.0	9
10	11.3				0.0		19.0	0.0	0.0	18.2	0.0	22.3	10
11	0.0				0.0		26.2	0.0	0.0	18.6	4.8	31.6 *	11
12	0.0			N	N	N	0.0	27.5	0.0	0.0	20.0	32.8	12
13	0.0			O	O	O	0.0	26.2	0.0	0.0	20.4	24.0 *	13
14	0.0			O	38.4 *	O	0.0	27.0	0.0	4.4	20.4 *	24.0	14
15	0.0			O	63.0	O	0.0	25.1	0.0	17.4	21.4	24.0	15
16	0.0	F	F	F	50.6	F	23.4	8.8	20.0	21.9	24.0	25.1	16
17	0.0	L	L	L	43.4	L	25.1	25.8	20.4	24.0	24.4	25.1	17
18	0.0	O	O	O	23.8	O	27.0	27.5	21.0	24.0	17.8 *	25.8	18
19	0.0	W	W	W	0.0	W	26.2	28.8 #	21.0 *	24.8	15.8	26.2	19
20	0.0				0.0		25.8	29.4	21.4	24.4	18.6	27.0	20
21	0.0				0.0		25.8	28.0	21.4 E	18.2 *	18.2	26.2	21
22	0.0				0.0		25.8	31.6	21.4 E	14.3	18.2	26.2	22
23	0.0				0.0		28.2	30.4	21.0 E	15.4	20.0	27.5	23
24	0.0				0.0		25.1	26.2	16.4	16.0	20.0	27.5	24
25	0.0				0.0		26.2	26.2	13.8	18.6	8.7	27.5	25
26	0.0				0.0		29.4	25.1	13.8	20.4	0.0	28.0	26
27	0.0				0.0		29.4	21.0	18.2	21.0	0.0	13.1	27
28	0.0				0.0		29.4	20.4	22.4	21.4	0.0	0.0	28
29	0.0						24.4	20.4	22.4	21.4	0.0	0.0	29
30	0.0						21.4	21.0	22.4	20.4	0.0	0.0	30
31	0.0						21.0	21.0	20.4	20.4	0.0	0.0	31
MEAN	5.7				7.8		18.9	15.0	15.7	16.4	11.4	15.6	MEAN
MAX	21.0				63.0		29.4	31.6	22.4	24.8	24.4	32.8	MAX
MIN	0.0				0.0		0.0	0.0	0.0	0.0	0.0	0.0	MIN
AC. FT.	350				436		1127	922	933	1010	700	931	AC. FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW

— E AND *

MEAN
DISCHARGE
8.9MAXIMUM
DISCHARGE
63.0TIME
MEAN
DAILYMINIMUM
DISCHARGE
0.0GAGE HT.
2.67GAGE HT.
2 15PERIOD
FROM
TO
1957TOTAL
ACRE FEET
6409

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	I 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM TO	ZERO ON GAGE	REF DATUM	
			CFS	GAGE HT.	DATE						
36 03 29	118 59 08	SE31 21S 28E				JAN 42-DATE			0.00	LOCAL	

Station located at "B" Lane Bridge, immediately east of Porterville. This is regulated diversion from Tule River. Altitude of gage is approximately 465 feet (from U. S. Geological Survey topographic map). Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME											
1975	C03984	PORTER SLOUGH DITCH AT PORTERVILLE											
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.9				0.0		0.0	12.8 *	11.3	18.5	16.1	0.0	1
2	3.2 E				0.0		0.0	9.8	14.3	13.8	10.4	0.0	3
3	3.4				0.0		0.0	9.8	9.6	4.9	4.3	0.0	3
4	3.5				0.0		0.0	6.4	6.5 *	0.0	4.9 *	0.0	4
5	3.5				0.0		0.0	0.0	6.2	0.0	1.9	0.0	5
6	3.5				0.0		0.0	0.0	8.0	0.0	0.3	0.0	6
7	4.4				0.0		0.0	0.0	17.0	0.0	1.0	0.0	7
R	4.6				0.0		0.0	0.0	21.2	0.0	0.0	0.0	8
9	4.6				0.0		0.0	0.0	12.3	0.3	0.0	0.0	9
10	3.2				0.0		0.0	0.0	1.1	6.1	0.0	0.0	10
11	0.0				0.0		4.7	0.0	0.0	7.0	0.0	4.4	11
12	0.0				0.0		10.4	0.0	0.0	7.2	3.0	14.8	12
13	0.0				0.0		10.6	0.0	0.0	7.7	9.9	12.5	13
14	0.0	N	N	N	0.5	N	12.8	0.0	0.0	8.9 *	7.4	8.4	14
15	0.0	O	O	O	2.4	O	12.3	0.0	3.2	9.3	8.6 *	9.5 *	15
16	0.0				2.4		10.5 *	0.0	10.2 *	10.9	10.0	10.7	16
17	0.0	F	F	F	1.7	F	11.4	3.0	10.0	10.2	10.9	12.5	17
18	0.0	L	L	L	1.3	L	13.8	6.8	11.3	9.0	7.9	17.4	18
19	0.0	O	O	O	0.0	O	13.0	5.7	11.4	8.9	4.4	18.1	19
20	0.0	W	W	W	0.0	W	12.3	9.1	12.2	8.4	6.6	19.2	20
21	0.0				0.0		10.9	9.9 *	15.1	8.0 *	6.3	16.6	21
22	0.0				0.0		10.2	10.4	18.7	6.8	6.0	15.1	22
23	0.0				0.0		11.7	9.9	14.8	7.8	7.7	15.7	23
24	0.0				0.0		12.3	8.6	10.7	8.2	8.1	17.9	24
25	0.0				0.0		13.6	8.6	6.6	9.5	4.9	19.4	25
26	0.0				0.0		13.1	10.7	6.5	8.0	0.0	20.4	26
27	0.0				0.0		12.2	7.8	9.4	7.8	0.0	12.6	27
28	0.0				0.0		18.5	7.7	19.0	8.2 *	0.0	0.0	28
29	0.0						19.4	8.8	19.9	8.6	0.0	0.0	29
30	0.0						15.1	9.6 *	21.2	9.6	0.0	0.0	30
31	0.0						7.8		12.3	0.0			31
MEAN	1.1				0.3		8.3	5.3	10.3	7.3	4.5	8.2	MEAN
MAX.	4.6				2.4		19.4	12.8	21.2	18.5	16.1	20.4	MAX.
MIN.	0.0				0.0		0.0	0.0	0.0	0.0	0.0	0.0	MIN.
AC.FT.	69				16		494	324	611	448	279	486	AC.FT.

E - ESTIMATED
 NR - NO RECORD
 * - DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW

- E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE				MINIMUM DISCHARGE				TOTAL ACRE FEET
3.8	DISCHARGE	GAGE HT.	MO	DAY	DISCHARGE	GAGE HT.	MO	DAY	2727
21.2	21.2	2.91	6	8	0.0	0.0	18.5	16.1	

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	14 SEC T & R MOS&M	DF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF DATUM
			CFS	GAGE HT.	DATE						
36 04 06	119 01 06	SE26 21S 27E				JAN 43-DATE		1943		0.00	LOCAL

Station located in Porterville 0.5 mile west of Porterville Post Office, approximately 150 feet downstream from head. This is regulated diversion from Tule River via Porter Slough. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	C03965	VLANDALIA DITCH NEAR PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.5 E							0.0	4.7	5.2	1.8	0.0	1
2	0.5 E							0.0	5.0	4.8 E	0.0	0.0	2
3	0.5 E							0.0	5.7	5.0	0.0	0.0	3
4	0.5 E							0.0	5.9	5.2	0.0	0.0	4
5	0.5 E							0.0	5.8	5.0	0.0	0.0	5
6	0.5 E							0.0	5.7	4.9	4.5	0.0	6
7	0.5 E							0.0	5.4	5.7	5.7	0.0	7
8	0.5 E							0.0	5.3	5.7	5.3	0.0	8
9	0.5 E							0.0	5.0	5.7	5.3	0.0	9
10	0.5 E							0.0	4.8	5.6	5.4	0.0	ID
11	0.5 E							0.0	4.7	5.2	5.3 *	0.0	11
12	0.5 E							0.0	4.7	4.9	5.2	0.0	12
13	0.5 E	N	N	N	N	N	N	0.0	5.0	4.9	5.0	0.0	13
14	0.5 E	O	O	O	O	O	O	0.0	5.3	4.8	5.2	0.0	14
15	0.5 E							0.0	5.2	4.8	5.0	0.0	15
16	0.5 E	F	F	F	F	F	F	2.9	5.0	4.8	5.0	0.0	16
17	0.0	L	L	L	L	L	L	4.5	5.3	5.0	4.9	0.0	17
18	0.0	O	O	O	O	O	O	4.1	5.4	5.2	4.8 *	0.0	18
19	0.0	W	W	W	W	W	W	3.6 *	5.6 *	5.3	2.6	0.0	19
2D	0.0							3.4	5.6	5.4	0.0	0.0	20
21	0.0							3.3	5.6	5.4 *	0.0	0.0	21
22	0.0							3.6	5.6	5.7	0.0	0.0	22
23	0.0							3.9	5.6	6.1 E	0.0	0.0	23
24	0.0							3.9	5.7	6.4 E	0.0	0.0	24
25	0.0							4.0	5.7	6.7 E	0.0	0.0	25
26	0.0							4.2	5.6	7.3	2.4	0.0	26
27	0.0							4.6	5.6	7.8	7.6 *	3.1	27
28	0.0							4.7	5.4	8.4	4.4	4.4	28
29	0.0							4.6	5.3	9.0	0.0	4.2 *	29
30	0.0							4.6	5.2 *	9.7	0.0	4.2	3D
31	0.0							4.6	10.5	0.0	0.0	0.0	31
MEAN	0.3							2.1	5.3	6.0	2.7	0.5	MEAN
MAX.	0.5							4.8	5.9	10.5	7.5	4.4	MAX.
MIN.	0.0							0.0	4.7	4.8	0.0	0.0	MIN.
AC. FT	16							126	318	369	166	32	AC. FT

E = ESTIMATED

NR = NO RECORD

* = DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

= E AND *

MEAN DISCHARGE 1.4	DISCHARGE 10.5	MAXIMUM DISCHARGE				DISCHARGE 0.0	GAGE HT 5.3	MO 7	DAY 31	TIME Mean Daily	DISCHARGE 0.0	GAGE HT 5.9	MO 7	DAY 31	TIME Local	TOTAL ACRE FEET 1029

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	14 SEC T & R MDB&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	RFF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
36 03 00	118 58 16	NE 5 22S 28E				1946-DATE		1948		0.00	LOCAL

Station located 2.6 miles southeast of Porterville approximately 1,000 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

JULY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME											
		1975	C03960	POPLAR DITCH NEAR PORTERVILLE									
AY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	2.0 E	50.0	50.0	0.0	0.0	127.4	0.0	33.0	40.0	49.0 *	123.2	128.6	1
2	37.4	50.0	52.0	0.0	0.0	128.0	0.0	33.0	35.8	45.6	121.4	132.2	2
3	27.7	0.0	52.0	0.0	15.3	127.4	0.0	31.4	27.4	81.8	119.6	136.0	3
4	55.	0.0	51.0	0.0	15.8	55.2 *	0.0	29.0	26.2	106.4	120.8	135.4	4
5	67.4	0.0	51.0	0.0	0.0	18.6	0.0	28.3	26.2	107.0	125.6	134.8	5
6	62.2	0.0	50.5	0.0	0.0	19.4	0.0	27.4	26.2	107.0	129.2 *	132.2	6
7	61.3	0.0	50.0	0.0	0.0	20.7	8.3	28.3	26.2	110.4	130.4	132.8	7
8	61.3	0.0	50.0	0.0	0.0	24.1	14.2	27.0	30.6	114.1	120.2	131.4	8
9	58.0	0.0	46.6 *	19.2	0.0	26.2	10.8	27.4	31.0	109.0	112.6	132.8	9
D	19.5	0.0	47.0	31.0	0.0	22.9	11.6	29.8	33.9	97.6	113.6	131.0	10
11	0.0	0.0	46.1	32.6	45.8 *	17.4	10.0	33.0	34.4	100.8	117.0	135.4	11
12	0.0	0.0	46.1	35.2	77.8	18.6	6.2	31.0	35.2	100.8	122.0	136.6	12
13	0.0	0.0	43.4	37.8	77.2	21.0	2.7	29.0	37.8	103.3	126.8	136.0	13
14	0.0	0.0	8.6	39.1	84.6	17.4	7.0	30.2	39.1	104.6	126.8	129.2	14
15	0.0	0.0	40.6	90.2	16.9	13.7	30.6	38.2	104.0	132.8	131.6 *	15	
16	0.0	0.0	41.0	96.9	18.1	17.4 *	29.4	37.0	104.6	132.8	131.6	16	
17	0.0	0.0	40.0	101.4	17.2 *	28.6	31.0	38.2	113.2	131.6	125.0	17	
18	0.0	0.0	40.0	104.6	16.4	43.9	32.6	39.6	119.6	132.2 *	129.8	18	
19	0.0	0.0	40.0 *	108.3	5.2	44.2	32.1 *	40.0	123.2	128.0	134.2	19	
20	0.0	0.0	39.6	106.4	0.0	42.9	32.1	40.6	120.2	123.8	130.4	20	
21	0.0	0.0	0.0	40.6	105.2	0.0	41.9	29.0	41.4	116.2 *	93.8 *	130.4	21
22	0.0	0.0	39.6	105.8	0.0	40.6	25.8	43.4	119.0	89.0	135.4	22	
23	0.0	0.0	0.0	34.8	107.0	0.0	40.0	24.1	41.9 *	125.0	97.6	136.0	23
24	0.0	0.0	0.0	8.2	108.3	0.0	36.1	22.9	41.9	125.6	101.4	137.8	24
25	0.0	20.4	0.0	119.6	0.0	30.6	25.5	44.2	123.8	102.0	138.4	25	
26	0.0	46.6 *	0.0	0.0	126.2 *	0.0	28.6	31.8	45.1	119.6	123.2 *	136.6	26
27	0.0	54.0	0.0	0.0	126.8	0.0	28.3	42.4	47.0	120.2	134.8	134.2	27
28	0.0	52.0	0.0	10.1	126.8	0.0	29.0	42.4	47.0	121.4	137.2	134.2	28
29	0.0	47.0	0.0	6.2	0.0	31.4 *	41.0	44.2	122.0	136.0	133.4	29	
30	0.0	47.6	0.0	5.4	0.0	32.1	40.0 *	47.6	122.6	134.8	133.4	30	
31	0.0	0.0	0.0	2.1	0.0	40.0	40.0	122.0	135.4			31	
MEAN	14.6	8.9	20.8	18.8	66.1	23.2	20.0	31.3	37.6	108.4	121.9	133.3	MEAN
AX	67.4	54.0	52.0	41.0	126.8	128.0	44.2	42.4	47.6	125.6	137.2	138.4	MAX.
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9	26.2	45.6	89.0	125.0	MIN.
FT.	897	531	1278	1156	3669	1424	1190	1925	2240	6664	7493	7932	AC. FT.

— ESTIMATED
R — NO RECORD
— DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN	MAXIMUM				MINIMUM				TOTAL
DISCHARGE	GAGE HT	DAY	TIME	DISCHARGE	GAGE HT	DAY	TIME	ACRE FEET	
50.3	138.4	3.45	9 25	Mean Daily	0.0	0.0	0.0	36399	

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M O B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY		PERIOD	ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE		FROM	TO			
36 03 18	119 00 54	SW36 21S 27E				APR 42-DATE			1942	0.00	LOCAL

Station located 1.0 mile south of Porterville approximately 4,750 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR		STATION NO.	STATION NAME										
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.0					0.0	4.4 E	1.8 E	10.0	7.6	1.0 a	1.0 a	1
2	0.0					0.0	4.9 *	2.9 E	16.9	6.2	1.0 a	2.3	2
3	0.0					0.0	5.0	6.0	10.9	6.5	1.0 a	3	3
4	0.0					0.3	6.2	7.4	14.8	10.2 *	1.0 a	4	4
5	0.0					3.2	6.0	7.0	15.6	10.7	1.0 a	5	5
6	0.0					4.1	0.0	5.7	5.6	15.8	12.3	1.0 a	6
7	0.0					3.9 *	0.0	5.4 E	6.0	8.8	11.3	2.3	7
8	0.0					4.2	0.0	5.5	3.2	17.2	10.4	3.6	8
9	0.0					4.5	3.2	5.2	4.8	9.9 *	10.2	3.4	9
10	0.0					4.5	5.0	5.1	6.6	8.3	10.1	3.6	10
11	0.4					4.2	5.5	4.4	6.5	7.1	8.9 *	5.4 *	11
12	2.3					4.7	5.3	3.8	6.7	6.8	10.2	4.1 E	12
13	6.2	N	N	N		4.6	5.2 E	5.8	9.3	7.4	8.4	2.5 a	13
14	6.5	O	O	O		5.1	4.7 E	5.4	11.3	7.5	8.2	2.5 a	14
15	5.9					5.2	3.8 E	5.5	11.3	7.8	4.7 *	1.2 a	15
16	4.9	F	F	F	F	4.8	3.6 E	4.8	10.6 *	9.6	6.3	3.0	16
17	0.0	L	L	L	L	2.2	2.1 E	0.0	11.9	7.1	7.0	2.8	17
18	0.0	O	O	O	O	0.0	0.0	1.4	11.9	7.1	7.5	2.3	18
19	0.0	W	W	W	W	0.0	0.0	3.1	12.1	8.3	14.5	2.3	19
20	0.0					0.0	0.0	3.4	12.5	8.9	14.0	2.3	20
21	0.0					0.0	0.0	3.7 *	11.0	11.3 *	10.1	2.3	21
22	0.0					0.0	0.0	1.5	12.3	14.0	6.8	1.2	22
23	0.0					0.0	0.0	0.0	12.3	14.3	5.1	0.0	23
24	0.0					0.0	0.0	0.0	13.3	14.8	5.0	0.0	24
25	0.0					0.0	0.0	0.0	14.5	15.8	5.0 *	0.0	25
26	0.0					0.0	2.6	0.0	16.4	17.2	5.5 E	0.0	26
27	0.0					0.0	3.8	0.0	16.1	17.5	5.6 E	0.0	27
28	0.0					0.0	3.4	0.0	16.4	17.5	5.9	0.0	28
29	0.0					0.0	3.6	0.0	18.2	17.5	5.5 *	0.0	29
30	0.0					0.0	4.4 E	0.0	15.6	14.0 E	2.0	0.0	30
31	0.0					0.0	0.0	0.0	9.7	1.0 a		31	
MEAN	0.8					1.8	1.9	3.1	10.0	12.1	7.9	1.7	MEAN
MAX	6.5					5.2	5.5	6.2	18.2	17.5	16.7	5.4	MAX
MIN.	0.0					0.0	0.0	0.0	1.8	6.8	1.0	0.0	MIN.
AC. FT.	52					110	111	191	597	744	485	101	AC. FT.

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *
 a — Gate leakage

MEAN DISCHARGE	DISCHARGE	MAXIMUM DISCHARGE			DISCHARGE	MINIMUM DISCHARGE			TOTAL ACRE FEET
3.3	18.2	24.0	6	29	Mean Daily	0.0	GAGE HT	MO DAY	2391

MEAN	1.7
MAX	5.4
MIN.	0.0
A.C. FT.	101

LATITUDE	LONGITUDE	I 4 SEC T & R M D B & M	LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE			
			OF RECORD			DISCHARGE			GAGE HEIGHT ONLY			PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT	MO	DAY	FROM	TO				
36 03 27	119 02 02	NW35 21S 27E				DEC 42-DATE				1942		0.00		LOCAL	

Station located 1.1 miles southwest of Porterville, approximately 3,400 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	C03948	WOODS-CENTRAL DITCH NEAR PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	93.0	0.0	88.5	0.0	0.0					0.0	223.0	175.0	1
2	86.6	0.0	88.0 *	0.0	0.0					0.0	213.0	179.0	2
3	73.8	0.0	94.0	0.0	0.0					0.0	224.0	165.0	3
4	55.0	0.0	107.4 E	0.0	0.0					0.0	216.0	164.0	4
5	0.0	0.0	96.9 E	0.0	0.0					0.0	200.0	179.0	5
6	0.0	0.0	97.4 E	0.0	0.0					0.0	209.0	189.0	6
7	0.0	0.0	97.9	0.0	0.0					35.6	205.0	170.0	7
8	0.0	0.0	97.4	0.0	0.0					171.0 *	202.0	166.0	8
9	0.0	0.0	77.6	0.0	0.0					190.0	197.0	165.0	9
10	0.0	0.0	33.0	0.0	0.0					189.0	191.0	158.0	10
11	0.0	0.0	46.5	0.0	13.1					173.0	200.0	159.0 *	11
12	0.0	0.0	48.2	5.5	142.1 *					157.0	207.0	172.0 *	12
13	0.0	0.0	45.8	16.4	163.5 a	N	N	N		162.0	209.0	174.0	13
14	0.0	0.0	7.6	15.1	146.0 a	O	O	O		171.0	192.0	176.0 E	14
15	0.0	0.0	0.0	16.2	124.9 a					170.0	176.0 *	175.0 E	15
16	0.0	0.0	0.0	19.3	126.3 a	F	F	F		170.0	164.0	157.0 *	16
17	0.0	0.0	21.5	127.2 a	L	L	L			170.0	160.0	150.0 *	17
18	0.0	0.0	0.0	23.0	129.7	O	O	O		164.0	154.0	152.0	18
19	0.0	0.0	0.0	22.5	23.5 E	W	W	W		163.0	178.0	157.0	19
20	0.0	0.0	0.0	22.0 *	23.5 E					174.0	185.0	157.0	20
21	0.0	0.0	0.0	19.0	0.0					180.0 *	192.0	148.0	21
22	0.0	0.0	0.0	19.0	0.0					189.0	189.0	134.0 *	22
23	0.0	0.0	0.0	16.2	0.0					199.0	185.0	143.0	23
24	0.0	0.0	0.0	0.0	0.0					201.0	179.0	159.0	24
25	0.0	0.0	0.0	0.0	0.0					201.0 *	178.0 *	166.0	25
26	0.0	7.5	0.0	0.0	0.0					212.0	184.0	175.0	26
27	0.0	71.0	0.0	0.0	0.0					217.0	190.0	173.0	27
28	0.0	80.0	0.0	0.0	0.0					209.0	202.0	179.0	28
29	0.0	91.0	0.0	0.0	0.0					203.0	203.0 *	178.0	29
30	0.0	93.5	0.0	0.0	0.0					208.0	192.0	166.0	30
31	0.0	0.0	0.0	0.0	0.0					217.0	168.0	157.0	31
MEAN	9.9	11.4	33.1	7.0	36.1					145.2	192.5	165.4	MEAN
MAX.	93.0	93.5	107.4	23.0	163.5					217.0	224.0	189.0	MAX.
MIN.	0.0	0.0	0.0	0.0	0.0					0.0	154.0	134.0	MIN.
AC. FT.	612	680	2035	428	2004					8927	11835	9844	AC. FT.

E = ESTIMATED
 NR = NO RECORD
 * = DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # = E AND *
 a = Includes CVP water

MEAN DISCHARGE 50.2	DISCHARGE 224.0	M A X I M U M GAGE HT 7.65	M O D E	D A Y	T I M E	DISCHARGE 0.0	GAGE HT 0.0	M I N I M U M D A Y	T I M E	TOTAL ACRE FEET 36365
---------------------------	--------------------	----------------------------------	---------	-------	---------	------------------	----------------	------------------------	---------	-----------------------------

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	14 SEC T & R MD&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
36 04 18	119 05 48	SE30 21S 27E				DEC 42-DATE		1942		0.00	LOCAL

Station located 4.5 miles west of Porterville, approximately 100 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources. This station is sometimes affected by backwater due to CVP water being delivered from the Friant-Kern Canal to Woods-Central Ditch approximately 100 feet downstream from station.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

DAY	WATER YEAR		STATION NO.	STATION NAME										DAY
	OCT.	NOV.		DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	
1	1258	624	341	326	498	976	660	1089	1204	1688	1711	844	1	
2	1304	622	284	307	553	928	719	969	1277	1658	1655	841	2	
3	1194	620	260	273	718	933	771	1008	1334	1559	1772	788	3	
4	967	619	338	270	668	970	678	1019	1296	1597	1851	739	4	
5	1002	609	458	270	584	1020	683	1015	1299	1593	1819	675	5	
6	1120	583	560	285	555	1024	649	917	1310	1634	1776	661	6	
7	1051	509	569	279	535	1048	640	889	1339	1624	1673	626	7	
8	1028	496	571	295	530	877	610	875	1474	1689	1583	600	8	
9	1080	480	550	298	549	864	563	586	1744	1731	1522	574	9	
10	1003	479	456	323	573	837	588	775	1833	1698	1563	598	10	
11	932	455	403	331	521	705	605	808	1846	1772	1520	630	11	
12	916	472	296	348	488	611	560	847	1863	1850	1581	601	12	
13	901	515	296	388	499	706	536	959	1814	1892	1652	573	13	
14	905	603	305	380	508	714	538	1024	1760	1888	1585	580	14	
15	906	643	355	371	497	615	536	1036	1747	1910	1517	560	15	
16	900	73	354	371	491	598	551	1053	1781	1903	1665	541	16	
17	917	753	348	344	488	582	584	999	1759	1779	1700	542	17	
18	945	742	352	375	499	560	546	919	1718	1767	1726	516	18	
19	941	697	352	357	549	586	543	903	1735	1785	1589	510	19	
20	923	708	393	349	641	596	544	873	1714	1778	1451	511	20	
21	887	736	374	351	658	600	521	645	1696	1760	1405	538	21	
22	646	697	378	345	680	613	521	835	1701	1770	1283	562	22	
23	640	686	373	371	730	604	529	836	1692	1787	1217	539	23	
24	640	672	362	367	797	595	614	807	1616	1842	1220	494	24	
25	631	696	312	366	835	641	628	803	1558	1868	1189	470	25	
26	628	705	311	372	902	718	713	868	1561	1896	1190	454	26	
27	623	708	325	375	992	657	774	945	1590	1922	1187	408	27	
28	645	700	360	371	1029	644	852	1040	1557	1873	1091	399	28	
29	635	668	357	367	637	997	1069	1575	1830	1873	887	416	29	
30	622	469	343	405	622	1129	1065	1602	1817	1831	831	423	30	
31	619		329	469		627	1113		1820		832		31	
MEAN	884	623	376	345	627	733	646	929	1600	1772	1459	574	MEAN	
MAX	1317	826	573	496	1130	1104	1138	1145	1883	1948	1860	683	MAX	
MIN	595	372	232	251	485	514	482	381	1184	1503	816	392	MIN	
AC. FT.	54365	37085	23137	21221	34844	45041	38444	57142	95197	108932	89738	34139	AC. FT.	

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN
DISCHARGE
883MAXIMUM
DISCHARGE
1948MINIMUM
DISCHARGE
232TOTAL
ACRE FEET
639265

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B R M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM TO	ZERO ON GAGE	REF DATUM	
			CFS	GAGE HT.	DATE						
35 25 9	118 56 8	SW 2 29S 28E	36000	461.37	11-19-50	12-6-66	1893-DATE		0.0	Mean sea level	
			9290a	454.94					0.0		

Also known as "Kern River at First Point". Station located 5.8 miles northeast of Bakersfield. Tabulated discharge is the regulated flow and is computed from noon to noon beginning at noon of day shown. Records furnished by Kern County Canal and Water Company. Drainage area is 2,407 square miles.

^aMaximum flow since construction of Isabella Dam in 1954.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR		STATION NO.	STATION NAME										
		1975	C05180	KERN RIVER AT SECOND POINT									
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1				0.0	34	209	8	413	255	573	577		1
2				0.0	39	163	6	359	301	591	530		2
3				0.0	108	125	19	364	353	558	520		3
4				0.0	228	139	19	367	371	574	526		4
5				0.0	211	165	19	359	396	573	555		5
6				0.0	200	178	17	296	492	573	572		6
7				0.0	187	175	16	171	494	564	571		7
8				0.0	181	139	15	158	480	564	544		8
9				0.0	184	74	10	133	511	607	586		9
10				0.0	211	77	8	93	527	609	420		10
11				0.0	221	66	17	188	566	609	409		11
12				0.0	184	25	17	167	686	636	394		12
13	N	N	N	0.0	203	34	14	178	741	657	378	N	12
14	O	O	O	0.0	213	42	1	196	737	691	434	O	14
15	O			0.0	210	25	16	198	652	692	446		15
16	F	F	F	0.0	199	18	23	226	650	695	401	F	16
17	L	L	L	0.0	195	9	27	215	631	668	375	L	17
18	O	O	O	0.0	188	11	39	184	617	645	350	O	18
19	W	W	W	0.0	185	2	47	154	605	716	365	W	19
20				0.0	197	5	54	182	601	759	356		20
21				0.0	195	5	48	186	609	702	287		21
22				0.0	189	4	35	200	632	646	255		22
23				0.0	186	8	38	196	628	592	233		23
24				0.0	206	10	64	198	617	570	175		24
25				0.0	210	6	91	215	596	594	130		25
26				0.0	212	6	131	192	552	585	105		26
27				0.0	210	5	202	187	514	614	93		27
28				0.0	204	5	230	199	526	624	97		28
29				0.0		4	270	222	524	603	96		29
30				0.0		6	352	208	548	599	50		30
31				23.0		12		215		594	0		31
MEAN MAX. MIN. ACT. FT.				1 23 0.0 46	185 228 34 10294	56.5 209 2 3475	61.8 352 1 3675	220 413 93 13545	547 741 255 32553	622 759 558 32553	346 577 0.0 38235		MEAN MAX. MIN. ACT. FT.

E — ESTIMATED
 NR — NO RECORD
 * — DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # — E AND *

MEAN DISCHARGE 170	MAXIMUM DISCHARGE				PERIOD OF RECORD				DATUM OF GAGE			
DISCHARGE 759	GAGE HT	MO	DAY	TIME	DISCHARGE 0	GAGE HT	MO	DAY	TIME	PERIOD FROM	ZERO ON GAGE	REF. DATUM

TOTAL ACRE FEET 123106

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECDRD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM			REF. DATUM
			CFS	GAGE HT	DATE			TD	10	1	
35 18 02	119 15 25	SE23 30S 25E									

Station located 0.5 mile west of Highway 43 on Kern River. Records furnished by Buena Vista Water Storage District. Tabulated discharge is the regulated flow.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	C07115	AVENAL CREEK AT HIGHWAY 33

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
MEAN													MEAN
MAX													MAX
MIN													MIN
AC. FT.													AC. FT.

E — ESTIMATED

NR — NO RECORD

* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

— E AND *

MEAN
DISCHARGEMAXIMUM
DISCHARGE GAGE HT. MO DAY TIMEMINIMUM
DISCHARGE GAGE HT. MO DAY TIMETOTAL
ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
35 43 50	119 59 35	36-24S-18E						1974			Local

Station located on upstream side of bridge over Avenal Creek, 7.6 miles south of Highways 41 and 33 intersection. There are no upstream reservoirs. Drainage area is 149 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1975	C07120	BUENA VISTA CREEK NEAR TAFT

E — ESTIMATED

NR - NO RECORD

* — DISCHARGE MEASUREMENT OR
OBSERVATION OF NO FLOW

- E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE		
LATITUDE	LONGITUDE	14 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE					
35 12 21	119 24 35	NW28 31S 24E	2.9		8-14-65		NOV 64-DATE	1964	0.00	LOCAL

DIVERSIONS

Diversion data formerly collected by the Department of Water Resources for the Stanislaus, Tuolumne, Merced, and San Joaquin Rivers and Dry Creek near Modesto have been discontinued. The last publication of such diversion data was in Bulletin 130-70.

The diversion data shown in Tables B-4 through B-8 have been furnished by the U. S. Bureau of Reclamation, City and County of San Francisco, local agencies including irrigation and water districts, and the Department's Division of Operations and Maintenance. Figures shown are monthly and annual acre-feet amounts of water diverted from the San Joaquin River, deliveries from project canals, deliveries to irrigation districts, and imports to and exports from the San Joaquin Valley.

The diversion data are published as received without rounding according to criteria normally used by the Department.

TABLE B-4

DIVERSIONS - SAN JOAQUIN RIVER
Fremont Ford Bridge to Gravelly Ford
October 1974 through September 1975

WATER USER	MILE AND TANK ABOUT MOUTH	NUMBER AND SIZE OF PUMP IN INCHES	MONTHLY DIVERSION IN ACRE - FEET											TOTAL DIVERSION OCT-SEPT ACRE-FEET		
			OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.		
--GAGING STATION - SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE	129.0															
--GAGING STATION - SAN JOAQ IN RIVER NEAR STEVINSON	136.7															
--GAGING STATION - SAN JOAQ IN RIVER NEAR DOS PALOS	186.0															
San Luis Canal Company	186.6 L	9495 6333*	9495	6333*	0	0	0	3929	12788	13291	21128	26781*	29033	27676	18581	169711
--FIREBAUGH BRIDGE	198.4															
--GAGING STATION - SAN JOAQUIN RIVER NEAR MENDOTA																
--MENDOTA DAM	208.63															
Central California Irrigation District	208.0 L	22209 6656*	22209	6656*	0	0	7185	15369	32763	5486	69772	74944	63344	80742*	41101	a 491234*
--FRESNO SLOUGH	209.0 L															
--DELTA-MENDOTA CANAL b	(0.21)															
Firebaugh Canal Company b	(0.4L)	1267	204	0	4491	3182	2065	6662	4462	6682	7252	6822	2051	a 49862		
M. Jensen																
Dudley, et al., (Marchina Bros)	b (3.4L)	0	0	0	173	343	305	137	36	290	268	218	26		1798	
State of California b (6.45+8.20)		4780	1668	1	1065	561	454	484	1210	2834	2231	2795	4445		22549	
Fresno Slough Water District	b (9.20-10.50)	58	0	0	262	637	75	468	214	446	657	655	190		3769	
--JAMES BYPASS b	(11.80R)															
Mason A. Loundy c (1.75)		81	2	0	54	339	448	45	393	431	772	1012	438		4769	
Reclamation District 160b c (1.50)		0	0	0	48	73	0	81	0	221	161	212	0		802	
James Irrigation District c (4.4)		0	0	0	2807	9698	704	5032	5756	11331	8739	7823	1882		47042	
Tranquillity Irrigation District b	(12.00-13.75)	60	0	0	2541	4760	528	1216	2632	5760	7446	6393	257		33919	
Melvin D. Hughes b (12.20)		0	0	0	0	12	1	13	14	16	0	0	12		6f	
--LONE WILLOW SLOUGH	219.8 R															
Columbia Canal Company	219.8 R	4126 62	0	1789	3979	3528	4778	4224	8995	9636	9299	6804			61740	
State Center Land Company	(1.16)	0	0	0	0	0	0	0	0	0	0	0	0			
M. Beck e 1-1		31	24	0	0	0	0	0	0	18	0	0	0		73	
Tulle Gun Club f 1-		1	0	0	0	0	0	0	0	0	10	0	0		30	
Westlands Water District	16*	0	0	0	2245	2862	2309	2527	4136	4465	3142	0			2175	
Grasslands	2402b 2846	0	0	0	0	0	0	0	0	0	0	0			39328	
T. W. Wilson	0	0	0	56	85	0	56	0	103	74	161	33			56	
Laguna Water District	0	0	0	0	0	0	0	0	200	200	15	64			680	
Tranquillity Gun Club	0	0	0	0	0	0	0	0	0	0	0	0			80	
Cole Gun Club	6	0	0	0	0	0	0	0	0	0	0	0			120	
Patos Unlimited	10	0	0	0	0	0	0	0	0	0	106	0	0		212	
120 Duck Club	60	0	0	0	0	0	0	0	0	0	0	0			120	
Pacheco Water District	20*	0	0	0	0	0	0	0	0	0	0	0			20*	
Mercy Springs Water District	0	0	0	0	0	0	0	0	0	70	70	0			2100	
--SAN JOAQUIN RIVER AT CHOWCHILLA BYPASS	219.83															
--GRAVELLY FORD CANAL	232.8 R															
FREMONT FORD BRIDGE TO GRAVELLY FORD																
Total		66940	18415	0	0	18390	35502	~820	64820	114800	135221	146164	139987	89441	905550	
Average cubic feet per second		108%	309	0	0	299	63%	908	142%	1867	2272	2377	2277	154	1251	
Monthly use in percent of seasonal		7.4	2.0	0	0	2.0	3.9	6.2	9.4	12.1	14.9	16.1	15.4	9.4	100.0	

Records for this reach furnished by the U. S. Bureau of Reclamation and the Contracting Entities, and do not include operational spill. Acre-feet values are published as received and not rounded to the criteria used by the Department of Water Resources.

* Includes purchased and transferred water.

a. Total does not include Central California Irrigation District diversion from the Co-Mendota Canal.

b. Plant is located on Fresno Slough which diverts from the San Joaquin River at mile 209.0 L. Distance from the San Joaquin River end bank of slough on which diversion is located are shown in parentheses.

c. Plant is located on Fresno Slough which diverts from Fresno Slough at mile 11.80 R. Distance from Fresno Slough end bank locations of diversions are shown in parentheses.

d. One 6-inch pump located on arm of slough at SW corner of S. 12, T. 14S, R. 15E.

e. One 8-inch pump located on arm of slough 1400 feet S of NW corner of S. 24, T. 14S, R. 15E.

f. One 8-inch pump located on arm of slough adjacent to M. Beck.

g. Total does not include deliveries under separate agreement by San Luis Water District.

TABLE B-5

IRRIGATION AND WELDING INFORMATION - EAST SILL - MAID AND CROPS
for the 1974 through September 1975

WATER USER	DIVERSION												ACREAGE IRRIGATED		
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	TOTAL	GENERAL	RICE
<u>Friant-Kern Canal</u>															
Total acre-feet diverted	44.1	21.1	2.11	21.4	79.0	9.1	144.1	12.5	145.0	14.4	14.4	11.1	11.1	11.1	11.1
Average cubic feet per second ^a	7.2	3.3	4.1	1	14.4	1.2	7.48	1.1	11.0	1.1	1.1	1.1	1.1	1.1	1.1
Monthly use in percent of seasonal	1.1	1.0	1.2	1.2	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
<u>Madera Canal</u>															
Total acre-feet diverted	1.887	1.7	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Average cubic feet per second ^b	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Monthly use in percent of seasonal	1.1	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<u>Merced Irrigation District</u>															
Main Canal	1.473	364.6	4.52	1.53	1.441	1.004	4.054	110.27	121.0	11.1	11.1	1.1	1.1	1.1	1.1
Northside Canal	1.0	52	131	1.65	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total acre-feet diverted	184.91	36.26	84	21.5	17.0	4.6	744	11.64	134.31	12.44	11.4	5.4	5.4	5.4	5.4
Average cubic feet per second ^c	2.9	0.2	63	34	22	3.6	8	104.4	193.2	1.2	1.2	1.2	1.2	1.2	1.2
Monthly use in percent of seasonal	3.0	1.0	3.6	0.3	1.3	1.0	6.0	11.3	18.1	1.0	1.0	1.0	1.0	1.0	1.0
<u>Turlock Irrigation District</u>															
Total acre-feet diverted	244.01	550.0	46.50	29.3	27.7	21.0	4.054	17.0	12.16	8.4	8.4	4.0	4.0	4.0	4.0
Average cubic feet per second ^d	401	92	74	3.6	3.6	3.6	3.6	14.1	14.1	1.1	1.1	1.1	1.1	1.1	1.1
Monthly use in percent of seasonal	3.6	8.0	6.0	9.3	9.1	7.1	9.1	17.4	17.4	1.0	1.0	1.0	1.0	1.0	1.0
<u>Ventura Irrigation District</u>															
Total acre-feet diverted	14.34	152.4	27.7	1.0	1.0	4.1	1.004	4.21	7.05	5.1	5.1	1.72	1.72	1.72	1.72
Average cubic feet per second ^e	2.8	2.6	13.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Monthly use in percent of seasonal	4.1	4.4	4.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<u>Waterford Irrigation District</u>															
Total acre-feet diverted	23.6	20	1	1	1	1	1	1	1	1	1	1	1	1	1
Average cubic feet per second ^f	3.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Monthly use in percent of seasonal	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<u>Oakdale Irrigation District</u>															
Northside Canal	13.91	3	1	1	1	1	1	121	11.02	241.2	25.48	24.74	23.03	18.441	12.845
Southside Canal	1425	1	1	1	1	1	1	1710	17.00	3.275	2.812	1.1	2.964	2.933	2.933
Total acre-feet diverted	13984	0	0	0	0	0	0	2220	2.052	344.00	54.82	54.82	54.82	44.274	3240.32
Average cubic feet per second ^g	534	0	0	0	0	0	0	36	4.70	300	1.2	1.2	1.2	1.2	1.2
Monthly use in percent of seasonal	10.1	0	0	0	0	0	0	16.0	16.0	1.0	1.0	1.0	1.0	1.0	1.0
<u>South San Joaquin Irrigation District</u>															
Total acre-feet diverted	1751	93	0	0	0	0	0	454.0	20.50	23.48	44.47	44.47	24.63	4964.3	2862.0
Average cubic feet per second ^h	93	0	0	0	0	0	0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Monthly use in percent of seasonal	1.1	0	0	0	0	0	0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

a Data for Madera and Friant-Kern Canals furnished by U. S. Bureau of Reclamation. All other data furnished by individual irrigation districts and published as received.

b An additional 61,188 acre-feet of water was pumped from wells.

c Of this acreage, 3.311 were double cropped. Does not include an undetermined amount of controlled drainage water.

d An additional 120,000 acre-feet of water was pumped from wells.

e Of this acreage, 41,605 were double cropped.

f An additional 3,160 acre-feet of water was pumped from wells.

g Of this acreage, 10,491 were double cropped.

h An additional 2.28 acre-feet of water was pumped from wells.

i Of this acreage, 434 were double cropped.

j Of this acreage, 494 were double cropped.

k This acreage also received 0.72 acre-feet of water from wells.

l This acreage also received an undetermined amount of well water, and an undetermined amount of controlled drainage water from Oakdale Irrigation District. Of this acreage, 1.41 were double cropped.

TABLE B-6
DELIVERIES FROM CENTRAL VALLEY PROJECT CANALS
October 1974 through September 1975

WATER USER	MILE POST FROM CANAL HEAD FROM TO	MONTHLY DELIVERIES IN ACRE FEET											TOTAL	
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	
Delta-Mendota Canal														
Plain View Water District	4.22 20.96	493	1	0	0	1	432	2022	4047	3564	3587	3450	2023	19617
The Westside Irrigation District	14.79	25	0	0	0	0	0	283	3004	1842	3025	3075	451	11705
Hospital Water District	18.05 30.96	987	19	0	276	559	900	3048	5298	6516	5988	5054	2980	31625
Santa-Carbono Irrigation District	20.42	243	0	0	144	331	298	0	4353	1353	1308	3294	805	12129
Kern Canon Water District	31.31 35.18	233	65	0	52	167	149	877	1230	1723	1451	1296	615	7859
West Stanislaus Irrigation District	31.31 38.14	0	0	0	6	0	613	2502	8016	8707	8779	7333	193	36149
Del Puerto Water District	35.73 42.51	413	9	0	90	128	336	1615	2717	3815	2759	2420	1324	15626
Salado Water District	42.10 46.85	0	0	0	0	46	358	1425	2701	2100	2091	1347	369	10437
Patterson Water District	42.51	38	0	0	49	59	400	707	1741	1639	739	1134	216	6722
Sunflower Water District	44.22 52.02	86	0	0	68	101	914	2084	2771	3323	2494	2114	865	14820
Orestimba Water District	46.83 51.41	77	0	0	343	90	441	2938	3908	2879	4494	2979	1012	19161
Foothill Water District	51.65 57.46	532	0	0	0	210	501	1133	1971	2193	2025	1972	1533	11890
Davis Water District	53.64 56.82	143	0	0	159	72	74	674	881	911	1091	673	431	5109
Mustang Water District	56.80 62.67	153	42	0	107	38	263	1256	2614	2658	3261	2898	1155	14445
Central California Irrigation District	58.26 76.06	130	36	0	176	308	734	4111	10622	12334	12973	11125	2549	55096
Quinto Water District	64.32 67.55	50	18	0	0	0	110	732	1251	1293	1212	1330	498	6494
Centinella Water District	66.20	248	2	0	0	0	34	197	453	661	612	539	379	3125
Romero Water District	66.70 68.03	71	0	0	0	0	45	647	651	307	713	937	606	3997
San Luis Water District, Municipal and Industrial	69.21	12	1	0	1	1	0	9	19	18	20	20	16	117
San Luis Water District	69.21 90.53	2850	579	0	3328	7384	4761	10262	11752	13086	12855	11497	5333	8368
William Affonso	80.03	0	0	0	0	0	82	0	48	55	65	55	26	26
Grassland Water District	70.00	11616	1977	0	0	0	0	0	0	0	0	0	5076	18671
Pacheco Water District	90.52	0	0	0	0	0	0	0	0	1336	1968	1158	280	4742
Sam Hamburg Farms	90.53	0	2	0	1	2	2	2	4	4	4	5	4	30
Panoche Water District	93.25 96.70	4185	2127	0	3192	3572	8124	7678	7939	11153	11303	8054	2106	69433
Eagle Field Water District	93.27 94.71	107	0	0	97	481	328	147	1010	562	766	927	485	4913
Oro Loma Water District	95.50 96.12	75	0	0	0	0	0	652	1182	1250	1240	1213	125	573
West Side Golf Club	95.95	15	9	6	4	5	8	12	20	25	24	28	22	175
Mercy Springs Water District	97.70 99.81	47	0	0	0	0	0	800	2215	2274	2323	2199	244	10102
Panache Water District, Municipal and Industrial	100.84	1	1	0	1	1	1	1	1	1	1	1	1	11
Widren Water District	102.03	0	0	0	0	0	0	203	331	176	168	186	15	1079
Broadview Water District	102.95	264	1222	0	1989	632	3228	1252	1110	3040	2586	1228	300	16851
Firebaugh Canal Company	109.45	0	0	0	301	196	0	1238	5877	6796	7472	7148	262	29293
State Fish and Game Salmon Run		0	0	0	0	0	0	0	0	0	0	0	0	0
San Luis Drain	111.03	162	48	0	71	12	12	176	92	121	123	92	84	993
Total		23358	6159	6	10455	14396	23066	48765	89781	97708	99516	86791	32174	53206
Net Deliveries DMC to Mendota Pool		77728	16778	0	33924	46653	61002	98614	13446	158444	170055	161379	102037	106060
Net Deliveries DMC to O'Neill Forebay		115470	-14248	0	109578	176715	150437	106634	2150	-9945	24619	42949	88821	812537
Buchanan Dam		0	0	34	0	0	0	0	0	0	0	0	0	34
Hidden Dam		0	0	81	0	0	0	0	0	0	0	0	0	81
Madera Irrigation District	6.10 32.2	0	0	0	0	6900	12546	1H078	33628	43605	46880	27233	18	18886
Adobe Ranch	20.6	85	60	56	0	0	0	0	0	0	89	71	80	441
Chowchilla Water District	35.9	1002	0	0	0	1400	3316	6815	23618	28673	28251	24336	12456	12986
Total		1087	60	171	0	8300	15862	24893	57246	72278	15220	51640	12554	319311
Fresno County Water Works #1B		8	4	2	2	4	5	7	14	19	20	18	13	11
County of Madera		3	4	1	2	1	2	3	3	3	3	2	2	24
Total		11	8	3	4	5	7	10	17	22	23	20	15	146

TABLE B-6 (Cont.)

DELIVERIES FROM CENTRAL VALLEY PROJECT CANALS
October 1974 through September 1975

WATER USER	MILE POST FROM CANAL HEAD FROM TO	MONTHLY DELIVERIES IN ACRE FEET											TOTAL	
		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	
Friant-Kern Canal														
Garfield Water District	7.53	176	21	0	0	172	117	391	532	56	640	513	274	3403
International Water District	14.9	130	0	0	0	0	27	37	148	192	285	247	229	1295
Round Mountain Ranch	20.22	5	0	0	0	0	0	0	0	7	9	4	9	34
Consolidated Irrigation District	28.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Laguna Irrigation District	28.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Liberty Water District	28.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Corcoran Irrigation District	28.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Stratford Irrigation District	28.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Tulare Lake Basin Water Storage District	28.50 & 95.64	0	0	0	0	0	0	0	0	0	0	0	0	0
Alta Irrigation District	28.50	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Fresno	25.51	0	0	0	0	0	0	0	0	0	11000	12000	0	23000
Fresno Irrigation District	25.51 & 28.50	11	0	0	1139	7025	0	10724	1782	6028	11377	7562	15272	70199
Murphy Slough Association	28.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Empire Westside Irrigation District	28.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Kings County Water District	28.50 & 71.29	0	0	0	0	0	0	0	4000	0	0	0	0	4000
Hills Valley Irrigation District	41.12	0	0	0	0	0	0	0	27	0	0	0	0	27
Orange Cove Irrigation District	35.87 & 53.31	2573	11	0	0	0	0	548	5102	6329	7390	592	5927	35291
City of Orange Cove	43.44	58	10	0	0	0	29	43	66	49	82	75	62	474
Stone Corral Irrigation District	56.90 & 64.40	429	0	0	0	0	83	725	1363	1512	1735	1769	1270	8856
Ivanhoe Irrigation District	65.04 & 68.13	1250	6	0	0	145	0	249	1391	1679	2989	2575	114	12274
Tulare Irrigation District	68.14 & 71.29	701	0	0	0	24341	0	31886	5438	2621	2414	10398	13011	186016
Lakeside Irrigation District	69.42	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaweah Delta Water Conservation District	69.08 & 71.29	0	0	0	0	0	0	0	0	0	0	0	0	0
Exeter Irrigation District	72.52 & 79.24	628	8	0	0	44	144	839	3637	4364	3879	2759	1874	18176
Lewis Creek Water District	81.54	64	0	0	0	0	0	5	218	262	232	247	213	1291
Lindsay-Strathmore Irrigation District	85.56	2459	173	0	0	0	0	0	0	0	1970	4613	4134	13349
Lindmore Irrigation District	86.17 & 91.12	2717	30	0	0	463	1507	2511	7227	9996	9831	9666	7113	50167
Porterville Irrigation District	93.93 & 98.62	0	0	0	0	0	2174	2259	3082	3685	3976	554	2934	23650
Lower Tule Irrigation District	95.67 & 98.62	12460	8603	0	0	15465	11762	30130	37307	42619	30130	22966	10837	222986
Tea Pot Dome	99.35	455	19	0	0	12	23	141	678	84	883	925	794	4821
Saucelito Irrigation District	106.62 & 107.3	809	82	0	0	2127	4158	4991	617	643	7693	6661	3199	42230
Terra Bella Irrigation District	102.65	1619	0	0	0	0	165	431	3105	3346	3751	3669	3122	19208
Pixley Irrigation District	102.69	1195	469	0	0	0	0	1038	4891	2220	0	0	0	10011
Delano-Earlimart Irrigation District	109.48 & 118.45	6849	2703	0	0	6985	18780	16099	21247	25570	30184	2415	1153	168145
Alpaugh Irrigation District	112.96	0	0	0	0	0	0	0	0	0	0	0	0	0
Southern San Joaquin Municipal Utility District	117.44 & 127.97	4374	1543	307	0	5173	17446	11807	16948	22586	26362	20800	11333	138679
Rag Golch Water District	117.96	0	0	0	0	0	0	0	0	0	0	0	0	0
Kern County Water Agency	130.03	0	0	0	0	0	0	0	0	0	0	0	0	0
Shafter-Wasco Irrigation District	134.42 & 137.17	2345	846	346	0	4532	8257	5917	8183	10855	13438	11964	6207	72060
Rosedale Rio Bravo Water Storage District	151.81	0	0	0	0	0	0	0	0	0	0	0	0	0
Buena Vista Water Storage District	151.81	0	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Water Storage District	151.80	2955	6264	1858	0	11514	13298	2475	36825	36137	31526	13570	12504	191206
Styrotek, Inc.	116.40	49	28	0	0	32	31	25	20	17	57	33	44	336
Total		44561	21016	2511	3138	78530	78001	145658	234574	21479	223413	11133	11129	13370

Data furnished by U. S. Bureau of Reclamation. Acre-feet values are published as received and not rounded to the criteria used by the Department of Water Resources. Deliveries do not include operational spill.

a Includes construction water for Hidden and Buchanan Dams.

TABLE B-7

DELIVERIES FROM CALIFORNIA AQUEDUCT^a

October 1974 through September 1975

WATER USER	IN ACRE FEET												TOTAL
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	
Delta Pumping Plant (Inflow to California Aqueduct)	62156	110990	170760	166059	135353	136996	117508	93428	12292	16495	253545	233444	150920
South Bay Pumping Plant	8055	8497	9378	9533	10177	3500	4260	11174	12506	14589	13860	963	115160
Oak Flat Water District	60	81	21	49	79	11	767	1803	1387	1496	1209	303	7266
Tracy Golf & Country Club	6	0	0	0	0	0	0	0	0	0	0	0	6
Total	8121	8578	9399	9582	10256	3511	5027	1297	13893	16085	15069	9934	122432
California Aqueduct at Check 12 (Inflow to San Luis Field Division)	3261	102736	161144	157217	124969	133010	112399	79502	211	700	233971	223154	1382274
San Luis Water District	236	99	25	300	361	607	1073	1396	1332	1324	971	375	8099
San Luis Water District	104	498	374	1238	435	308	814	1257	1796	2719	1597	646	12392
Panoche Water District	410	733	1652	4662	4406	5854	3841	2741	4493	7658	6052	1799	44301
Westlands Water District ^c	27320	29071	50015	12224	113015	114657	111689	118062	173549	174146	148907	51093	1234247
City of Huron	49	0	0	14	25	30	31	52	77	83	72	62	495
Avenal Community Service District	41	27	19	28	21	24	27	64	79	85	85	71	571
Total	27929	30329	52660	128666	117902	120873	116401	122176	179996	184691	156713	53670	1292006
Tulare Lake Basin Water Storage District	11615	12420	22946	30308	11810	10139	20074	7972	3481	18671	25256	16068	201202
Empire Westside Irrigation District	101	649	491	663	511	573	586	336	583	767	975	293	6528
Kings County	165	0	165	175	175	175	25	0	175	175	175	175	1580
Dudley Ridge Water District	3069	2539	2166	2886	5373	7820	8143	7979	10074	12430	12454	5421	80356
Hacienda Water District	1794	0	0	588	419	623	1100	1441	500	487	800	806	8952
Kern County Water Agency	11914	11498	12075	30791	44683	61500	47457	69049	102555	117853	118138	43174	670687
Boswell Farms ^d	0	0	0	0	0	0	0	0	0	0	0	0	0
Buena Vista Water Storage District ^d	0	0	0	1465	2062	410	410	370	480	510	500	207	6397
USBR - Fish and Wildlife	0	0	0	0	0	0	0	0	0	0	0	0	2222
Total	38658	27606	37845	66876	65033	81240	76195	87147	11846	150581	15630	68293	977924
Devil's Den Water District	300	0	925	1690	2340	2478	1103	946	980	2019	2596	694	16871
Kern County Water Agency	1732	2598	1103	5292	8692	9434	10954	15173	17234	21784	19873	5213	119073
Green Valley Water District	0	0	0	0	0	0	0	404	558	609	646	0	2217
Total	2032	2598	2028	6982	11022	11912	1235	16523	1872	25213	23115	5907	139161

Data furnished by the Division of Operations and Maintenance.

^a Entitlement and Surplus water have been combined in this table and do not include operational losses.^b Deliveries made by U. S. Bureau of Reclamation.^c Includes construction water and delivery to City of Coalinga.^d Repayment of Preconsolidation water.

TABLE B-8

IMPORTS AND EXPORTS

October 1974 through September 1975

WATER USER	IN ACRE FEET												TOTAL
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	
Imports from Delta													
California Aqueduct (a)	54035	102412	161361	157277	125097	133487	112481	80451	(b) 0	410	238476	223514	1388997
Delta-Mendota Canal	211641	0	627	165228	212299	231177	250702	242842	237787	283595	276083	216442	2348427
Total Imports	265676	102412	161988	122505	357396	364664	363183	323201	217787	284005	14563	430462	137424
Exports													
City and County of San Francisco (c)	22945	16723	148t5	15846	14314	21211	18448	19051	21747	24615	22322	21564	233654
A. D. Edmonston Pumping Plant (d)	0	23052	3141	63310	54067	613H1	13756	1 36'	36H3	60660	69903	57644	69027
Total Exports	22945	39775	88062	73156	68381	82531	32204	37420	6430	85275	92222	59228	682681

Data for Delta-Mendota Canal furnished by U. S. Bureau of Reclamation. Data for Tuolumne River exports furnished by City and County of San Francisco. Data for California Aqueduct furnished by Department of Water Resources, Division of Operations and Maintenance. Acre-feet values are published as received and not rounded to the criteria normally used by the Department of Water Resources.

(a) Water pumped at Delta Pumping Plant less deliveries to South Bay Aqueduct, Oak Flat Water District.

(b) Water pumped by South Bay Aqueduct exceeds amount pumped by Delta Pumping Plant. Assumed excess water taken from Aqueduct Storage.

(c) Exports from Tuolumne River.

(d) Deliveries to Southern California.

DAILY MEAN GAGE HEIGHTS

Presented in Table B-9 are records of daily mean gage heights for key stations on major streams in the San Joaquin Valley for the 1974-75 water year.

At the bottom of the stage tables are shown the major river crests occurring for the 1974-75 water year. The table also shows the location of the station, maximum gage height of record, period of record, and datum of gage. The elevation of water surface at the gaging station is obtained by adding the gage height reading to the elevation of the gage datum presented in each table. Gage height for stage tables is computed from recorder charts and is reported to one-hundredth of a foot.

TABLE B-9

DAY	DAILY MEAN GAGE HEIGHT (IN FEET)											DAY
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	
1												1
2												2
3												3
4												4
5												5
6												6
7												7
8												8
9												9
10												10
11												11
12												12
13												13
14												14
15												15
16						LAKE DRY						16
17												17
18												18
19												19
20												20
21												21
22												22
23												23
24												24
25												25
26												26
27												27
28												28
29												29
30												30
31												31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED											
NR — NO RECORD											
NE — NO FLOW											

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R M D B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
30 03 10	119 49 35			196.8	6-28-41			FEB 37	DATE	1937	0.00 USCGS
Station located 2.2 miles southwest of Chatom Ranch, 6 miles southwest of Corcoran on south end of El Rico Bridge. Tulare Lake receives water from Kings, Kaweah, and Tule Rivers during high-water periods and occasionally from Kern River, Deer Creek, and several small intermittent streams. Elevation at lowest point of lake bed is now about 175 feet, U. S. Geological Survey datum. Records furnished by Tulare Lake Basin Water Storage District and the Boswell Company.											

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR STATION NO		STATION NAME									
1975 B07885		SAN JOAQUIN RIVER BELOW FRIANT									

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	2.18	2.06	1.81	1.90	1.96	1.93	2.09	2.50	2.48	2.53	2.61	2.27	1
2	2.15	2.06	1.81	1.90	1.99	1.93	2.09	2.52	2.49	2.52	2.54	2.26	2
3	2.12	2.06	1.84	1.90	1.96	1.93	2.10	2.51	2.50	2.52	2.54	2.26	3
4	2.07	2.03	1.84	1.91	1.94	1.93	2.10	2.51	2.52	2.51	2.53	2.26	4
5	2.08	1.98	1.83	1.91	1.97	1.94	2.17	2.51	2.52	2.52	2.53	2.26	5
6	2.08	1.98	1.82	1.92	1.99	2.04	2.27	2.50	2.60	2.53	2.52	2.26	6
7	2.08	1.98	1.83	1.92	2.09	1.99	2.16	2.49	2.60	2.52	2.51	2.25	7
8	2.08	1.91	1.84	1.95	2.09	1.99	2.13	2.50	2.59	2.51	2.51	2.25	8
9	2.07	1.75	1.84	1.93	2.09	1.98	2.11	2.50	2.60	2.52	2.51	2.25	9
10	2.08	1.74	1.84	1.92	2.19	1.99	2.09	2.50	2.57	2.50	2.50	2.26	10
11	2.07	1.74	1.84	1.92	2.11	2.06	2.09	2.50	2.56	2.46	2.49	2.24	11
12	2.07	1.74	1.85	1.92	2.10	2.02	2.08	2.50	2.57	2.46	2.49	2.23	12
13	2.07	1.74	1.86	1.92	2.11	2.07	2.06	2.51	2.57	2.45	2.49	2.23	13
14	2.07	1.75	1.86	1.92	2.09	2.22	2.06	2.52	2.58	2.45	2.43	2.23	14
15	2.06	1.76	1.87	1.92	1.99	2.10	2.09	2.52	2.56	2.45	2.36	2.19	15
16	2.06	1.77	1.87	1.92	1.95	2.12	2.09	2.52	2.53	2.45	2.35	2.16	16
17	2.06	1.77	1.87	1.92	1.93	2.12	2.09	2.54	2.54	2.45	2.35	2.16	17
18	2.06	1.76	1.86	1.93	1.92	2.08	2.08	2.54	2.54	2.44	2.35	2.17	18
19	2.06	1.76	1.86	1.93	1.93	2.08	2.09	2.53	2.55	2.44	2.35	2.17	19
20	2.07	1.76	1.87	1.93	1.94	2.07	2.05	2.53	2.54	2.44	2.34	2.17	20
21	2.07	1.78	1.87	1.93	1.94	2.08	2.08	2.52	2.54	2.43	2.33	2.17	21
22	2.09	1.79	1.87	1.93	1.93	2.43	2.03	2.48	2.54	2.44	2.32	2.17	22
23	2.11	1.78	1.87	1.93	1.93	2.23	2.30	2.47	2.54	2.43	2.28	2.17	23
24	2.12	1.78	1.88	1.93	1.94	2.15	2.62	2.47	2.54	2.50	2.29	2.17	24
25	2.12	1.78	1.88	1.93	1.95	2.23	2.62	2.46	2.54	2.60	2.30	2.17	25
26	2.13	1.79	1.89	1.94	1.95	2.24	2.44	2.45	2.54	2.60	2.30	2.16	26
27	2.13	1.79	1.89	1.94	1.95	2.17	2.30	2.45	2.54	2.64	2.30	2.19	27
28	2.15	1.79	1.90	1.94	1.95	2.15	2.29	2.46	2.54	2.69	2.30	2.24	28
29	2.14	1.80	1.90	1.95	1.95	2.13	2.38	2.46	2.54	2.69	2.31	2.24	29
30	2.14	1.80	1.90	1.95	1.95	2.12	2.49	2.46	2.53	2.68	2.30	2.24	30
31	2.11		1.90	1.95		2.11		2.47		2.68	2.28		

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED											
NR — NO RECORD											
NE — NO FLOW											

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B. & M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
36 59 04	119 43 24	SW 7 11S 21E	77,000	23.8	12-11-37	OCT 07-DATE			1938	294.00	USGS
12,400 ^a 11.69 6-6-69											
Station located 2 miles downstream from Friant Dam and 1.5 miles downstream from Cottonwood Creek. Flow regulated by Millerton Lake beginning in 1944, and by other upstream reservoirs. Records furnished by U. S. Geological Survey. Drainage area is 1,675 square miles.											

^a Maximum flows since construction of Friant Dam in 1944.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

	WATER YEAR	STATION NO.	STATION NAME
	1975	B07400	SAN JOAQUIN RIVER NEAR STEVINSON

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	62.18	61.45	61.10	61.20	61.42	62.47	64.48	62.45	62.34	61.23	61.08	62.01	1
2	61.97	62.81	61.09	61.17	62.18	62.66	63.76	62.33	62.26	61.21	61.06	62.01	2
3	62.35	62.90	61.40	61.17	65.66	62.56	63.57	62.30	62.29	61.13	60.99	62.11	3
4	62.74	62.70	62.81	61.17	69.71	62.40	63.62	62.12	61.96	61.14	61.03	62.36	4
5	62.47	62.47	63.98	61.19	70.05	62.20	63.98	62.09	61.75	61.07	61.02	62.25	5
6	62.25	61.71	64.04	61.18	70.23	62.62	64.24	62.10	61.43	61.13	61.13	62.02	6
7	62.00	61.39	63.33	61.17	69.83	62.91	64.85	61.69	61.21	61.23	61.15	61.56	7
8	61.79	61.37	62.80	61.22	66.92	63.61	65.14	61.49	61.22	61.27	61.16	61.44	8
9	61.61	61.33	62.37	61.39	68.07	64.89	65.91	61.46	61.22	61.29	61.15	61.48	9
10	61.64	61.21	61.75	62.83	67.59	65.55	66.33	61.38	61.25	61.26	61.20	61.89	10
11	61.62	61.32	61.54	63.26	67.96	66.45	65.96	61.33	61.28	61.24	61.26	62.18	11
12	61.62	61.24	61.49	62.95	69.16	66.16	65.25	61.34	61.37	61.23	61.32	62.56	12
13	61.69	61.12	61.47	62.53	69.03	65.71	64.70	61.34	61.27	61.19	61.29	62.76	13
14	61.42	61.26	61.48	62.20	66.36	65.66	64.26	61.30	61.20	61.10	61.26	62.95	14
15	61.42	61.33	61.38	61.97	68.46	66.41	63.29	61.35	61.19	61.12	61.40	63.16	15
16	61.35	61.30	61.36	61.81	68.25	66.22	63.08	61.42	61.23	61.28	61.60	63.16	16
17	61.24	61.27	61.53	61.72	67.45	66.44	63.21	61.70	61.20	61.78	61.89	62.92	17
18	61.03	61.25	61.53	61.63	66.55	66.68	63.65	61.79	61.34	61.80	61.81	62.82	18
19	60.93	61.23	61.48	61.56	65.78	66.39	64.01	61.99	61.23	61.63	61.46	62.66	19
20	60.97	61.20	61.42	61.72	65.09	66.07	63.86	62.18	61.21	61.47	62.33	62.60	20
21	60.99	61.18	61.44	61.84	64.54	65.47	63.79	61.95	61.15	61.57	62.92	62.52	21
22	60.95	61.18	61.27	61.78	64.12	65.05	63.48	61.96	61.09	61.51	63.04	62.52	22
23	60.90	61.19	61.35	61.83	63.35	66.22	62.82	62.03	61.09	61.38	63.00	62.51	23
24	60.92	61.05	61.23	61.85	62.92	67.61	62.54	62.03	61.07	61.19	63.10	62.52	24
25	60.98	61.13	61.16	61.81	62.53	67.78	62.52	62.27	61.04	61.08	63.15	62.54	25
26	61.02	61.14	61.14	61.77	62.02	67.33	63.42	62.50	61.06	61.01	62.83	62.61	26
27	60.97	61.12	61.11	61.74	62.09	67.76	63.44	62.37	61.03	60.98	62.29	62.46	27
28	61.09	61.13	61.08	61.69	62.27	68.20	63.38	61.90	61.33	60.98	61.95	62.50	28
29	61.19	61.13	61.16	61.51		67.48	63.47	61.94	61.26	60.98	61.86	62.76	29
30	61.24	61.12	61.21	61.33		66.32	63.26	61.75	61.06	61.01	61.85	62.31	30
31	61.18		61.23	61.33		65.40		62.10		61.06	61.96		31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2-06-75	0515	70.34									

NR — NO RECORD

NE — NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 17 42	120 51 00	26 7S 10E	26740	76.23	2-26-69	OCT 61-DATE	MAY 61-SEP 61	1961		0.00	USCGS

Station located on bridge 2.3 miles south of Stevenson on Lander Avenue. Flows regulated by upstream reservoirs and diversions. Drainage area is 7,388 square miles.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO	STATION NAME
1975	B07375	SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	56.31	55.70	55.32	55.24	55.61	56.75	58.99	56.77	55.95	55.65	55.07	56.56	1
2	56.14	56.22	55.23	55.22	55.95	56.96	58.23	56.55	55.98	55.70	55.10	56.51	2
3	56.21	56.48	55.32	55.20	57.27	56.88	57.84	56.44	56.08	55.62	55.23	56.53	3
4	56.39	56.38	56.09	55.09	61.04	56.75	57.71	56.28	55.94	55.59	55.25	56.54	4
5	56.26	56.28	56.95	55.01	62.24	56.69	57.94	56.27	55.76	55.62	55.28	56.39	5
6	56.04	56.06	57.28	55.04	62.57	56.87	58.16	56.31	55.56	55.66	55.35	56.23	6
7	55.84	55.75	57.06	55.03	62.57	57.19	58.62	56.09	55.45	55.68	55.37	56.06	7
8	55.64	55.80	56.68	55.07	62.17	57.79	58.99	55.89	55.47	55.73	55.40	55.86	8
9	55.56	55.76	56.40	55.07	61.52	58.37	59.46	55.75	55.44	55.60	55.48	55.83	9
10	55.53	55.69	56.11	55.56	60.95	59.00	60.04	55.78	55.45	55.46	55.50	56.10	10
11	55.52	55.71	55.98	56.17	60.88	59.76	60.01	55.79	55.54	55.42	55.37	56.29	11
12	55.45	55.70	55.96	56.16	61.62	59.87	59.50	55.82	55.71	55.26	55.50	56.44	12
13	55.50	55.59	55.96	55.93	62.05	59.60	58.91	55.96	56.04	55.25	55.53	56.49	13
14	55.46	55.67	55.98	55.75	61.77	59.28	58.58	55.92	56.14	55.41	55.42	56.59	14
15	55.41	55.78	55.95	55.63	61.66	59.80	57.98	55.91	55.91	55.47	55.54	56.71	15
16	55.29	55.78	55.89	55.51	61.60	60.00	57.54	55.95	56.10	55.50	55.60	56.82	16
17	55.08	55.76	55.90	55.45	61.12	59.98	57.39	56.09	56.42	55.82	55.68	56.62	17
18	54.90	55.74	55.82	55.38	60.36	60.31	57.56	56.12	56.24	56.03	55.79	56.39	18
19	54.86	55.78	55.68	55.31	59.64	60.16	57.82	56.25	55.60	55.93	56.04	56.35	19
20	54.85	55.85	55.60	55.43	58.95	59.92	57.81	56.33	55.39	55.71	56.61	56.40	20
21	54.98	55.73	55.54	55.66	58.43	59.48	57.64	56.20	55.42	55.67	57.12	56.42	21
22	55.04	55.67	55.46	55.82	58.05	59.00	57.54	56.09	55.55	55.74	57.18	56.44	22
23	55.00	55.67	55.40	55.82	57.66	59.33	57.11	56.26	55.63	55.81	57.15	56.41	23
24	54.96	55.61	55.38	55.89	57.30	60.59	56.74	56.28	55.65	55.72	57.16	56.37	24
25	55.01	55.63	55.38	55.91	57.09	61.17	56.70	56.24	55.50	55.48	57.19	56.26	25
26	55.08	55.62	55.37	55.85	56.67	60.97	57.06	56.30	55.54	55.31	57.23	56.20	26
27	55.18	55.61	55.35	55.82	56.51	61.06	57.33	56.38	55.54	55.28	57.06	56.22	27
28	55.28	55.53	55.35	55.78	56.63	61.45	57.31	56.26	55.62	55.34	56.75	56.16	28
29	55.36	55.49	55.31	55.82	56.82	61.33	57.28	56.16	55.67	55.24	56.61	56.41	29
30	55.43	55.44	55.27	55.69	60.58	57.08	55.93	55.69	55.17	56.47	56.51	30	
31	55.47		55.27	55.58		59.70		55.81		55.16	56.48		31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED	2-06-75	1530	NR — NO RECORD		62.63	NE — NO FLOW					

LATITUDE	LONGITUDE	1 4 SEC T & R MDB & M	MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
			OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FRDM	TO		
37 18 35	120 55 45		9180a	68.05	2-26-69	MAR 37-DATE		1944	1957	-3.73	USCGS
								1957	1959	-3.77	USCGS
								1959		0.00	USCGS

Station located 30 feet below Fremont Ford Bridge, 4.5 miles west of Stevenson, 6.7 miles upstream from the Merced River. Drainage area is approximately 8,090 square miles.

a During periods of high flow some water bypasses the station through three overflow channels known as North, Middle, and South Mud Sloughs.

TABLE B-9 (Cont.)
DAILY MEAN GAGE HEIGHT
 (IN FEET)

WATER YEAR		STATION NO.	STATION NAME
1975	B05170	MERCED RIVER BELOW SNELLING	

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	6.36	7.76	6.02	7.50	7.35	7.52	8.81	6.56	6.28	6.36	6.39	7.03	1
2	6.36	7.77	6.02	7.49	8.29	7.51	8.54	6.62	6.24	6.46	6.46	7.18	2
3	6.36	7.75	8.14	7.52	7.75	7.52	8.21	6.66	8.56	6.28	6.43	7.57	3
4	6.35	7.87	8.10	7.52	7.80	7.54	7.91	6.64	6.80	6.27	6.46	7.77	4
5	6.38	8.00	8.07	7.51	7.99	7.59	7.97	6.73	8.55	6.30	6.58	7.79	5
6	6.41	8.02	8.06	7.52	8.52	7.59	7.88	6.90	6.97	6.36	6.53	7.71	6
7	6.46	8.04	8.06	7.50	8.66	7.64	7.78	6.80	10.15	6.43	6.35	7.63	7
8	6.59	8.03	8.06	7.60	8.63	7.64	8.59	6.70	10.19	6.49	6.40	7.64	8
9	8.28	8.03	8.06	7.53	8.74	7.55	8.98	6.60	10.70	6.51	6.46	7.68	9
10	8.57	8.02	7.98	7.50	8.98	7.60	8.73	6.58	11.57	6.49	6.37	7.70	10
11	8.40	8.01	7.89	7.49	9.70	7.56	8.52	6.58	12.15	6.50	6.46	7.82	11
12	8.24	8.01	7.90	7.51	10.08	7.54	8.51	7.13	12.06	6.46	6.35	7.98	12
13	7.39	8.04	7.88	7.50	10.26	7.76	8.53	7.74	11.80	6.52	6.42	8.09	13
14	6.48	8.05	7.87	7.51	10.00	7.67	8.44	8.19	11.87	6.61	6.37	8.12	14
15	6.52	8.05	7.86	7.51	9.47	7.58	8.36	8.28	12.27	6.64	6.35	8.21	15
16	6.48	8.01	7.78	7.50	9.46	7.66	8.29	8.27	12.11	6.64	6.36	8.28	16
17	6.49	8.01	7.62	7.49	9.08	7.58	8.25	8.26	10.92	6.28	6.38	8.27	17
18	6.44	8.05	7.56	7.49	8.44	7.55	8.48	8.27	9.50	6.31	6.47	8.25	18
19	6.43	8.04	7.52	7.51	8.08	7.55	8.40	8.27	8.41	6.30	6.61	8.27	19
20	6.44	8.04	7.51	7.49	8.03	7.55	8.36	8.28	8.06	6.30	6.59	8.28	20
21	6.43	8.06	7.52	7.49	8.04	7.59	8.26	8.33	8.19	6.32	6.55	8.32	21
22	6.38	8.07	7.51	7.49	8.04	7.98	7.78	8.43	8.21	6.32	6.49	8.40	22
23	6.38	8.08	7.49	7.49	8.03	7.60	7.45	8.53	8.18	6.28	6.46	8.48	23
24	6.38	8.08	7.49	7.44	8.01	8.08	7.30	8.47	8.15	6.26	6.57	8.55	24
25	6.59	8.08	7.50	7.46	8.03	9.16	6.99	8.44	8.10	6.29	6.63	8.59	25
26	7.70	8.04	7.50	7.47	7.84	9.94	6.78	8.45	8.10	6.26	6.55	8.58	26
27	6.38	8.05	7.51	7.49	8.04	7.98	7.78	8.43	8.21	6.22	6.51	8.67	27
28	7.78	8.04	7.52	7.49	7.54	9.71	6.73	8.45	6.73	6.25	6.54	8.84	28
29	7.73	8.07	7.52	7.49	9.72	6.72	8.42	6.58	6.25	6.68	8.92	29	
30	8.10	8.03	7.51	7.45	9.75	6.65	8.33	6.74	6.24	6.79	8.97	30	
31	7.81		7.52	7.29		9.42		8.29	6.24	6.90			31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED			6-16-75	0130	12.35						
NR — NO RECORD											
NE — NO FLOW											

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD			REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 30 06	120 27 03	NE17 5S 14E	14500	17.10	1-7-65	NOV 58-DATE		1958	221.12	USGS	

Station located 0.2 mile downstream from Merced-Snelling highway bridge, 1.4 miles southwest of Snelling. Flow regulated by upstream reservoirs and dams. Drainage area is 1,096 square miles. Prior to November 1958, records available for a site 3.6 miles downstream. Merced Irrigation District Main Canal and several small gravity diversions are upstream from station.

TABLE B-9 (Cont.)
DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR		STATION NO.	STATION NAME
	1975	B05155	MERCED RIVER AT CRESSEY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	11.03	NR	12.33	11.76	11.63	11.81	13.85	11.10	12.48	11.20	10.77	11.30	1
2	11.02	NR	12.33	11.74	13.56	11.78	13.04	11.06	12.48	10.94	10.80	11.37	2
3	11.05	NR	12.49	11.74	14.34	11.75	12.88	11.08	12.50	10.86	10.90	11.41	3
4	11.08	12.07	12.62	11.76	12.50	11.77	12.25	11.08	12.90	10.81	10.96	11.96	4
5	11.09	12.25	12.46	11.75	13.49	11.83	12.20	11.08	12.83	10.82	10.95	12.02	5
6	11.08	12.33	12.39	11.76	12.75	11.88	12.26	11.14	12.72	10.81	11.06	12.06	6
7	11.08	12.35	12.37	11.77	13.16	11.94	12.05	11.15	14.21	10.79	11.02	11.99	7
8	11.09	12.38	12.37	11.77	13.21	12.88	12.48	11.03	15.25	10.79	10.92	11.99	8
9	11.24	12.36	12.36	11.86	13.94	12.71	13.43	11.02	15.36	10.84	10.92	12.03	9
10	12.71	12.35	12.37	11.82	14.04	12.03	13.52	10.95	16.83	10.87	10.97	12.02	10
11	13.11	12.34	12.23	11.76	14.29	12.21	12.95	10.92	18.14	10.85	10.90	12.05	11
12	12.78	12.35	12.18	11.76	15.23	11.96	12.86	10.92	18.69	10.89	10.90	12.25	12
13	12.67	12.35	12.19	11.76	15.63	11.91	12.84	11.48	18.19	10.87	10.87	12.40	13
14	11.62	12.37	12.16	11.75	16.59	13.11	12.83	12.01	17.89	10.89	10.88	12.58	14
15	11.12	12.37	12.15	11.75	15.15	12.22	12.72	12.31	18.37	10.91	10.86	12.63	15
16	11.05	12.37	12.14	11.74	14.56	12.05	12.59	12.40	18.76	10.96	10.87	12.79	16
17	11.00	12.34	12.01	11.72	14.48	12.22	12.53	12.41	17.81	11.05	10.90	12.79	17
18	10.99	12.34	11.90	11.71	13.51	11.93	12.60	12.46	15.66	10.82	10.96	12.75	18
19	10.96	12.37	11.84	11.71	12.76	11.86	12.74	12.49	13.74	10.80	11.11	12.76	19
20	10.96	12.36	11.80	11.73	12.53	11.84	12.62	12.48	12.74	10.79	11.17	12.84	20
21	10.96	12.37	11.80	11.71	12.42	11.84	12.61	12.52	12.49	10.81	11.15	12.85	21
22	10.95	12.38	11.80	11.71	12.39	12.96	12.39	12.63	12.55	10.83	11.07	12.97	22
23	10.92	12.40	11.78	11.70	12.35	12.46	11.82	12.77	12.52	10.87	10.98	13.07	23
24	10.92	12.41	11.76	11.70	12.32	12.05	11.69	12.87	12.49	10.78	11.04	13.15	24
25	10.91	12.40	11.76	11.68	12.27	12.91	NR	12.74	12.41	10.77	11.03	13.26	25
26	11.10	12.38	11.76	11.70	12.31	14.99	NR	12.76	12.34	10.77	11.06	13.33	26
27	NR	12.35	11.76	11.70	11.95	14.90	NR	12.77	12.23	10.78	10.98	13.27	27
28	NR	12.37	11.78	11.72	11.83	14.74	NR	12.72	11.42	10.76	10.93	13.47	28
29	NR	12.35	11.77	11.71	14.72	NR	12.69	11.22	10.67	10.96	13.64	29	
30	NR	12.39	11.76	11.71	14.75	NR	12.62	11.16	10.77	11.04	13.64	30	
31	NR		11.76	11.64	14.72			12.51		10.77	11.18		

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
6-12-75	1900	18.80									

EST — ESTIMATED

NR — NO RECORD

NE — NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			OATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	'GAGE HEIGHT ONLY	PERIOD FROM TO			REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 25 28	120 39 47	SW 9 6S 12E	34400	22.67	12-4-50	JUL 41-DATE	APR 41-JUL 41	1950	1962	96.24	USCGS
				32.67a	12-4-50				1962	86.23	USCGS

Station located 150 feet downstream from McSwain Bridge, immediately north of Cressey. Prior to May 20, 1960, station located 250 feet upstream from bridge. Flow regulated by upstream reservoirs and diversions. Drainage area is 1,224 square miles.

a Reflects present datum.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

	WATER YEAR	STATION NO.	STATION NAME
	1975	B07300	SAN JOAQUIN RIVER NEAR NEWMAN

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	49.45	50.39	50.09	49.66	49.99	50.71	53.99	50.41	50.56	49.84	NR	49.84	1
2	49.41	50.44	50.06	49.63	50.14	50.74	53.04	50.26	50.64	49.78	NR	49.91	2
3	49.51	50.56	50.18	49.60	51.78	50.68	52.30	50.14	50.63	49.62	NR	49.95	3
4	49.61	50.53	50.67	49.57	51.62	50.60	52.04	50.03	50.61	49.51	NR	49.96	4
5	49.53	50.43	51.20	49.52	54.63	50.96	51.80	49.94	50.72	49.50	49.09	50.11	5
6	49.32	50.46	51.37	49.51	55.41	50.71	51.76	49.91	50.69	49.52	49.07	50.14	6
7	49.22	50.39	51.31	49.51	55.57	50.96	51.96	49.91	50.59	49.45	49.07	50.05	7
8	49.13	50.46	51.12	49.52	55.57	51.38	52.16	49.78	51.53	49.44	49.10	50.03	8
9	49.10	50.48	50.95	49.54	55.08	52.15	52.55	49.65	52.26	49.36	49.07	50.08	9
10	49.21	50.45	50.79	49.68	54.83	52.35	53.30	49.58	52.57	49.28	49.16	50.12	10
11	49.87	50.44	50.73	49.93	54.55	52.42	53.57	49.55	53.61	49.21	49.14	50.27	11
12	50.23	50.40	50.62	49.93	55.00	52.66	53.24	49.56	54.60	49.15	49.10	50.42	12
13	50.26	50.37	50.59	49.83	56.04	52.43	52.91	49.61	55.06	49.12	49.13	50.53	13
14	50.29	50.40	50.60	49.78	56.50	52.22	52.50	49.77	NR	49.24	49.11	50.60	14
15	49.78	50.48	50.06	49.75	56.65	52.85	52.12	50.01	53.79	49.25	49.10	50.81	15
16	49.39	50.52	50.53	49.73	56.12	52.90	51.63	50.27	55.16	49.33	49.16	50.94	16
17	49.16	50.53	50.40	49.72	55.50	52.79	51.44	50.56	55.39	49.42	49.28	50.95	17
18	48.98	50.50	50.25	49.69	53.63	52.95	51.49	50.63	54.97	49.51	49.45	50.77	18
19	48.92	50.48	50.06	49.69	53.72	52.84	51.75	50.73	53.38	49.38	49.59	50.78	19
20	48.90	50.50	49.95	49.98	52.83	52.53	51.97	50.76	51.85	49.37	49.71	50.76	20
21	48.95	50.43	49.87	50.11	52.27	52.22	51.88	50.77	51.04	49.38	50.07	50.83	21
22	49.03	50.36	49.81	50.22	51.89	51.96	51.73	50.76	50.90	49.29	50.21	50.99	22
23	48.97	50.34	49.76	50.25	51.63	52.43	51.43	50.78	50.95	49.21	50.18	51.00	23
24	48.94	50.32	49.73	50.26	51.39	51.89	50.90	50.84	50.76	49.07	50.12	51.02	24
25	48.92	50.31	49.70	50.26	51.25	53.36	50.79	50.90	50.71	48.92	50.27	51.12	25
26	48.94	50.24	49.69	50.20	51.08	53.95	50.75	50.99	50.62	48.86	50.21	51.12	26
27	49.11	50.19	49.69	50.15	50.95	54.84	50.82	51.05	50.53	48.94	50.00	51.17	27
28	49.64	50.17	49.71	50.07	50.78	55.28	50.78	50.95	50.43	48.82	49.88	51.16	28
29	49.94	50.15	49.73	50.10		55.42	50.68	50.78	50.07	NR	49.69	51.41	29
30	50.05	50.10	49.70	50.06		55.15	50.57	50.72	49.88	NR	49.66	51.59	30
31	50.06		49.69	50.00		54.59		50.60		NR	49.65		

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2-15-75	0200	56.74									

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & R	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		REF DATUM
			CFS	GAGE HT	DATE			FROM	TO	
37 21 02	120 58 34	SW 3 7S 9E	34700a	65.90	2-26-69	APR 12-DATE		1912	47.24	USCGS
								1959	47.31	USCGS
									0.00	USCGS

Station located 300 feet downstream from bridge on Hills Ferry Road, 500 feet downstream from the Merced River, 3.5 miles northeast of Newman. Records furnished by U. S. Geological Survey. Drainage area is 9,520 square miles. This station equipped with DWR radio telemeter. Flow records are published in the U. S. Geological Survey report "Surface Water Records of California". Flows regulated by upstream reservoirs and diversions.

a During periods of high flow the Merced River overflows into Merced River Slough bypassing this station on the San Joaquin River. The maximum discharge of record (34,700 cfs) includes flow in Merced River Slough.

TABLE B-9 (Cont.)
DAILY MEAN GAGE HEIGHT
 (IN FEET)

	WATER YEAR	STATION NO.	STATION NAME										
	1975	B07200	SAN JOAQUIN RIVER AT PATTERSON BRIDGE										
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	33.82	34.30	33.95	33.63	33.90	34.70	38.48	34.15	34.43	33.67	32.95	33.68	1
2	33.86	34.43	33.93	33.60	33.96	34.69	37.69	33.95	34.64	33.67	32.88	33.73	2
3	33.91	34.50	34.06	33.58	34.44	34.61	36.83	33.82	34.53	33.58	32.96	33.79	3
4	33.99	34.55	34.37	33.56	36.19	34.48	36.34	33.93	34.47	33.51	33.03	33.79	4
5	33.96	34.47	34.80	33.53	37.37	34.55	36.08	33.82	34.50	33.55	33.02	33.92	5
6	33.73	34.43	35.02	33.51	38.38	34.85	35.96	33.68	34.41	33.55	32.98	33.94	6
7	33.78	34.46	35.08	33.52	38.91	35.20	36.05	33.79	34.20	33.46	33.02	33.96	7
8	33.78	34.51	34.96	33.51	39.17	35.68	36.33	33.63	34.69	33.33	33.04	33.87	8
9	33.65	34.52	34.81	33.51	39.09	36.35	36.45	33.51	35.51	33.33	33.00	33.93	9
10	33.56	34.51	34.66	33.54	38.70	36.63	36.99	33.44	35.89	33.27	33.08	33.95	10
11	33.82	34.49	34.56	33.71	38.65	36.45	37.39	33.51	36.52	33.15	33.16	34.16	11
12	34.21	34.49	34.49	33.80	38.48	36.59	37.44	33.63	37.58	33.07	33.08	34.33	12
13	34.33	34.43	34.41	33.77	39.16	36.66	37.12	33.51	38.34	33.06	32.96	34.39	13
14	34.32	34.38	34.41	33.71	40.02	36.65	36.78	33.59	38.72	33.16	32.96	34.58	14
15	34.15	34.41	34.41	33.70	40.46	36.71	36.46	33.82	38.78	33.23	33.01	34.85	15
16	33.80	34.41	34.36	33.68	40.38	36.92	35.87	34.15	38.89	33.37	33.03	34.83	16
17	33.62	34.40	34.30	33.66	39.87	36.87	35.53	34.39	39.16	33.40	33.29	34.87	17
18	33.47	34.39	34.22	33.64	39.27	36.78E	35.32	34.54	39.23	33.45	33.56	34.81	18
19	33.40	34.36	34.08	33.61	38.43	36.65E	35.44	34.71	38.35	33.42	33.75	34.61	19
20	33.36	34.36	33.95	33.70	37.40	36.54E	35.69	34.70	36.76	33.37	33.68	34.58	20
21	33.33	34.33	33.86	33.87	36.62	36.42E	35.74	34.74	35.52	33.31	33.99	34.68	21
22	33.41	34.26	33.78	34.00	36.07	36.29	35.54	34.87	35.16	33.22	34.14	34.87	22
23	33.44	34.21	33.73	34.06	35.77	36.42	35.41	34.81	35.08	33.14	34.07	34.92	23
24	33.40	34.16	33.70	34.11	35.51	36.86	34.99	34.76	34.84	33.07	34.00	34.94	24
25	33.35	34.16	33.68	34.12	35.32	37.13	34.74	34.79	34.82	32.96	34.00	35.07	25
26	33.31	34.13	33.66	34.07	35.13	37.60	34.69	34.77	34.67	32.87	33.89	35.04	26
27	33.35	34.07	33.66	34.03	34.97	38.21	34.67	34.90	34.46	32.82	33.78	34.99	27
28	33.65	34.04	33.67	33.97	34.85	38.98	34.66	34.69	34.31	32.86	33.67	35.15	28
29	33.93	34.02	33.69	33.95		39.32	34.42	34.57	34.16	32.95	33.55	35.37	29
30	34.06	33.98	33.66	33.97		39.45	34.25	34.51	33.90	32.99	33.57	35.58	30
31	34.13		33.64	33.91		39.14		34.40		32.97	33.72		

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED	2-15-75	1615	40.52								

NR — NO RECORD

NE — NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE NT.	DATE			FROM	TO		
37 29 40	121 04 50	SW15 5S 8E	54.0		6-13-38			APR 38-SEP 66	1938 1959	0.00	USED
			50.47a		6-13-38	OCT 69-DATE			1959	0.00	USCGS
			9600b	46.12	2-16-73				1959	3.53	USED

Station located on the Patterson-Turlock Bridge, 3.1 miles northeast of Patterson.
 Drainage area is 9,758 square miles.

a Reflects present datum.
 b Maximum discharge since station was rated in October 1969.

TABLE B-9 (Cont.)
DAILY MEAN GAGE HEIGHT
 (IN FEET)

WATER YEAR	STATION NO.	STATION NAME											
		TUOLUMNE RIVER AT HICKMAN BRIDGE											
1975	B04150												

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	72.40	73.71	71.68	72.38	73.06	71.34	70.86	70.22	70.36	69.67	69.58	69.67	1
2	71.93	74.04	71.86	71.99	72.06	71.37	70.71	70.19	69.82	69.66	69.77	69.66	2
3	71.91	73.90	72.24	73.60	71.70	71.56	70.29	70.24	69.74	69.66	69.77	69.95	3
4	71.69	73.79	71.96	73.32	72.76	72.25	70.25	70.26	69.74	69.67	69.69	70.54	4
5	71.27	72.31	72.16	72.44	72.64	72.24	70.54	70.26	70.19	69.67	70.14	71.20	5
6	71.19	71.72	72.21	72.08	72.56	72.48	70.42	70.26	70.29	69.70	70.10	71.28	6
7	71.14	71.70	72.18	73.57	72.53	72.41	70.34	70.28	69.96	69.63	69.72	71.33	7
8	71.17	71.69	72.18	73.40	72.11	72.07	70.81	70.39	69.82	69.69	69.63	71.01	8
9	71.11	71.69	72.14	73.50	71.67	71.43	70.71	70.29	69.79	69.80	69.87	70.94	9
10	71.05	71.70	72.18	73.55	71.57	71.73	70.55	70.29	70.27	69.83	69.80	71.20	10
11	71.34	71.70	72.18	73.21	72.41	72.52	70.31	70.29	70.44	70.10	69.69	70.94	11
12	71.27	71.67	72.21	72.30	72.35	71.27	70.23	70.28	70.02	69.98	69.98	71.35	12
13	70.89	71.67	72.18	71.96	72.58	71.04	70.22	70.41	69.85	69.71	69.80	71.29	13
14	70.27	71.67	72.19	73.52	72.56	71.37	70.22	70.64	70.24	69.64	69.69	70.92	14
15	70.60	71.75	72.18	73.55	72.19	71.12	70.22	70.30	69.85	69.79	69.65	70.87	15
16	72.59	71.79	72.08	73.58	71.55	71.14	70.21	70.30	69.77	69.70	69.67	70.85	16
17	72.57	71.80	71.63	73.61	70.99	71.13	70.21	70.31	69.73	69.65	69.68	70.84	17
18	72.58	71.80	71.56	73.31	71.52	71.31	70.22	70.32	69.73	69.78	69.93	70.99	18
19	72.48	71.77	71.56	72.39	72.49	72.23	70.22	70.31	69.75	69.67	70.20	71.32	19
20	72.73	71.77	71.77	71.99	72.56	72.52	70.23	70.33	69.74	69.63	69.82	70.93	20
21	72.81	71.78	71.95	73.62	72.62	72.42	70.22	70.31	69.73	69.62	69.66	70.85	21
22	72.49	71.78	71.42	73.58	72.28	72.26	70.22	70.32	69.74	69.76	69.81	70.87	22
23	73.58	71.78	71.37	73.62	71.52	71.43	70.22	70.32	69.75	70.69	69.71	71.28	23
24	73.57	71.79	72.12	73.52	71.58	71.59	70.22	70.47	69.72	70.41	69.68	71.39	24
25	73.37	71.79	72.35	73.06	72.33	72.17	70.22	70.34	69.76	70.26	69.67	71.62	25
26	73.48	71.77	71.98	72.11	71.94	71.19	70.24	70.33	69.75	70.31	69.86	71.64	26
27	73.37	71.65	73.35	71.96	71.18	71.01	70.25	70.32	69.74	69.84	69.71	71.43	27
28	73.45	71.59	73.15	73.56	71.03	70.95	70.22	70.61	69.74	69.71	69.68	71.04	28
29	73.57	71.48	72.44	73.58			70.89	70.23	70.59	69.74	69.76	70.85	29
30	73.42	71.67	72.06	73.59			70.88	70.23	70.86	69.70	69.68	69.66	30
31	73.35		73.31	73.61			70.88		70.74		69.63	69.68	31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1- 7-75	0315	74.95	1- 7-75	0320	74.92						
2- 1-75	0330										

E - ESTIMATED
NR - NO RECORD
NE - NO FLOW

LATITUDE	LONGITUDE	I 4 SEC T & R M D B & M	MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE			
			OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM	
			CFS	GAGE HT	DATE			FROM	TO			
37 38 10	120 45 14	NW34 3S 11E	59000	96.2	12-8-50	JUL 32-OCT 36 JAN 37-MAR 37 JUL 37-FEB 38 JUL 38-DEC 38 MAR 39-DATE		JUL	32-OCT 36 JAN 37-MAR 37 JUL 37-FEB 38 JUL 38-DEC 38 MAR 39-DATE	1932	-1.13	USCGS

Station located at Hickman-Waterford road bridge, immediately south of Waterford. Flow regulated by reservoirs and powerplants. Drainage area is 1,655 square miles. In August 1964, this station was moved approximately one-quarter mile downstream to a point immediately upstream of the new Hickman-Waterford road bridge.

TABLE B-9 (Cont.)
DAILY MEAN GAGE HEIGHT
 (IN FEET)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	68.53	68.78	68.85	67.60	67.59	67.84	68.36	68.39	68.32	66.91	68.36	68.49	1
2	68.51	68.69	69.11	67.60	67.59	67.85	68.25	68.51	68.38	68.42	68.41	68.46	2
3	68.59	68.59	69.34	67.63	70.46	68.02	68.31	68.50	68.37	68.46	68.36	68.44	3
4	68.50	68.55	69.21	67.65	70.31	68.31	68.43	68.61	68.36	68.36	68.38	68.46	4
5	68.51	68.54	69.31	67.64	70.36	68.35	68.34	68.59	68.30	68.34	68.37	68.67	5
6	68.52	68.56	69.57	67.70	69.31	68.34	69.43	68.54	68.31	68.39	68.29	68.50	6
7	68.50	68.57	69.56	67.74	68.52	68.23	70.18	68.61	68.39	66.92	68.26	68.53	7
8	68.47	69.03	69.50	67.71	68.45	68.67	69.65	68.43	68.28	68.86	68.33	68.54	8
9	68.43	69.55	69.47	67.69	68.83	70.25	69.43	68.43	68.32	68.35	68.35	68.56	9
10	68.47	69.54	69.47	67.75	72.62	69.28	69.11	68.35	68.32	68.29	68.33	68.56	10
11	68.54	69.52	69.64	67.92	70.16	69.14	68.77	68.49	68.39	68.34	68.34	68.51	11
12	68.51	69.51	69.65	67.79	68.82	69.07	68.65	68.43	68.40	68.39	68.44	68.57	12
13	68.56	69.50	69.61	67.71	68.91	68.89	68.58	68.38	68.45	68.43	68.36	68.51	13
14	68.49	69.33	69.58	67.67	73.64	72.51	68.49	68.37	68.31	68.32	68.31	68.33	14
15	68.41	68.90	69.54	67.68	70.19	71.50	68.40	68.21	68.24	68.32	68.28	68.43	15
16	68.69	68.91	69.50	67.65	68.76	69.77	68.34	68.36	68.53	68.33	68.40	68.51	16
17	68.55	68.86	69.49	67.60	68.44	72.58	68.42	68.34	69.12	68.30	68.36	68.51	17
18	68.49	68.96	69.46	67.59	68.32	69.47	68.51	68.26	66.32	68.35	68.47	68.47	18
19	68.46	69.27	69.47	67.58	68.23	68.79	68.47	68.21	66.40	68.37	68.89	68.57	19
20	68.40	67.99	69.46	67.57	68.16	68.53	68.46	68.33	68.49	68.43	68.77	68.56	20
21	68.48	67.73	68.47	67.57	68.12	68.41	68.35	68.49	68.45	68.69	68.67	68.67	21
22	69.92	67.69	67.78	67.57	68.18	70.29	68.53	68.31	68.54	68.70	68.63	68.64	22
23	70.68	67.67	67.73	67.57	68.12	73.00	68.52	68.37	68.90	68.60	68.51	68.61	23
24	70.73	67.68	67.80	67.56	68.06	69.79	68.47	68.38	69.03	68.35	68.51	68.65	24
25	70.69	67.67	67.65	67.57	68.01	69.50	68.44	68.37	68.37	68.31	68.61	68.57	25
26	69.49	67.67	67.62	67.56	68.00	71.46	68.61	68.33	68.40	68.27	68.64	68.54	26
27	69.14	67.67	67.62	67.55	67.96	69.59	68.66	68.24	68.44	68.38	68.64	68.65	27
28	69.09	67.67	67.64	67.56	67.90	69.59	68.50	68.23	68.39	68.38	68.63	68.59	28
29	68.96	67.66	67.61	67.56	68.54	68.57	68.57	68.27	68.32	68.38	68.42	68.54	29
30	68.65	67.65	67.71	67.61	67.55	68.45	68.46	68.30	66.73	68.38	68.41	68.54	30
31	68.67			67.60	67.55	68.41		68.30		68.34	68.48		

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED			3-23-75	0030	76.05						
NR — NO RECORD											
NE — NO FLOW											

LOCATION		MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		REF DATUM	
		CFS	GAGE HT.	DATE			FROM	TO		
37 39 26	120 55 19	SE24	3S 9E	7710	88.04	12-23-55	MAR 41-DATE	1941	0.00	USGS

Station located 0.1 mile downstream from Claus Road bridge, 4 miles east of Modesto. Tributary to Tuolumne River. June 1930 to March 1941 records available for a site 2.5 miles downstream. This is a Department of Water Resources-Modesto Irrigation District cooperative station. Drainage area is 192.3 square miles. There are no upstream impairments.

TABLE B-9 (Cont.)

**DAILY MEAN GAGE HEIGHT
(IN FEET)**

WATER YEAR 1975 STATION NO. B04120 STATION NAME TUOLUMNE RIVER AT MOKESTO

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	42.76	44.63	NR	43.49	44.90	41.77	41.76	41.31	NR	41.04	40.44	40.90	1
2	42.34	45.52	NR	41.95	43.13	42.04	41.70	41.31	NR	40.92	40.67	40.90	2
3	42.27	45.69	NR	43.77	42.22	41.77	41.56	41.32	NR	40.96	40.95	40.90	3
4	42.22	45.49	NR	44.33	43.67	42.31	41.43	41.35	NR	40.95	40.96	41.20	4
5	42.06	44.56	NR	43.62	43.75	NR	41.48	41.35	NR	40.99	40.99	41.48	5
6	42.00	42.64	NR	42.01	43.46	NR	41.66	41.35	40.46	41.07	41.14	41.67	6
7	41.99	42.35	NR	44.05	43.21	NR	41.73	41.36	41.15	41.10	41.04	41.75	7
8	41.98	42.34	NR	44.24	43.02	NR	41.95	41.38	41.04	41.10	40.89	41.66	8
9	41.93	42.41	41.78	44.20	42.37	NR	42.06	41.39	40.98	40.99	40.91	41.59	9
10	41.82	42.41	42.80	44.45	42.52	NR	41.91	41.31	41.06	40.97	40.99	41.65	10
11	41.87	42.40	42.83	44.48	43.13	NR	41.69	41.36	41.31	41.04	40.97	41.62	11
12	41.92	42.38	42.87	43.47	42.91	NR	41.51	41.35	41.19	41.10	40.93	41.71	12
13	41.83	42.39	42.87	41.99	43.15	NR	41.46	41.37	41.07	41.06	41.01	41.76	13
14	41.66	42.37	42.85	43.80	44.33	NR	41.42	41.49	41.06	40.93	40.96	41.63	14
15	41.45	42.34	42.89	44.44	43.69	NR	41.40	41.38	41.12	40.89	40.84	41.62	15
16	42.01	42.40	42.79	44.60	42.44	NR	41.38	41.35	41.00	39.94	40.89	41.58	16
17	42.49	42.41	42.28	44.65	41.91	41.62	41.37	41.33	41.15	40.92	40.90	41.54	17
18	42.49	42.41	42.11	44.65	41.78	42.25	41.42	41.33	40.92	40.91	41.09	41.58	18
19	42.41	42.46	42.07	43.81	42.62	42.49	41.41	41.33	40.98	41.00	41.48	41.83	19
20	42.52	42.31	42.06	41.67	43.05	43.21	41.42	41.34	40.99	40.91	41.40	41.66	20
21	42.58	42.30	42.30	44.03	42.92	43.26	41.42	41.41	41.01	40.94	41.08	41.60	21
22	43.30	42.30	41.96	44.57	43.14	43.56	41.38	NR	41.00	40.91	40.97	41.57	22
23	44.83	42.29	41.72	44.72	42.34	44.07	41.38	NR	41.01	41.16	41.00	41.71	23
24	45.19	42.29	42.08	44.64	41.86	42.42	41.40	NR	41.10	41.46	40.93	41.80	24
25	45.24	42.30	42.53	44.38	42.93	43.02	41.41	NR	40.93	41.26	40.99	41.91	25
26	45.08	42.29	41.96	43.26	42.61	43.13	41.38	NR	40.94	41.25	41.05	42.00	26
27	44.79	42.26	43.24	41.96	42.03	42.28	41.42	NR	40.96	41.12	41.13	41.97	27
28	44.65	42.22	43.81	43.92	41.80	42.00	41.35	NR	40.93	41.05	41.04	41.79	28
29	44.82	42.12	43.21	44.56	41.81	41.81	41.34	NR	40.93	40.96	41.00	41.65	29
30	44.82	42.20	42.03	44.76	41.80	41.33	NR	40.96	40.98	41.00	41.00	41.65	30
31	44.60		43.49	44.68		41.81		NR	40.90	41.00			31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2-01-75	1230	45.91									

E - ESTIMATED

NR - NO RECORD

NE - NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 37 38	120 59 20	SW33 3S 9E	57000	69.19	12-9-50	JAN 95-DEC 96 MAR 40-DATE	1878-1894 1891-1894	1940		0.00	USCGS

Station located at U. S. Highway 99 Bridge. Records furnished by U. S. Geological Survey. Flow records are published in the U. S. Geological Survey report "Surface Water Records of California". Drainage area is 1,884 square miles. This station equipped with DWR radio telemeter. Flows regulated by upstream reservoirs and diversions.

TABLE B-9 (Cont.)
DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO	STATION NAME
1975	BO4105	TUOLUMNE RIVER AT TUOLUMNE CITY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	28.04	29.99	27.17	28.81	30.03	25.71	26.33	24.31	24.63	23.57	23.30	23.29	1
2	27.70	30.54	27.36	27.23	28.97	26.15	25.93	24.31	24.34	23.39	23.25	23.28	2
3	27.11	30.96	27.83	27.46	27.22	25.93	25.44	24.33	23.88	23.37	23.32	23.18	3
4	27.04	30.85	28.05	29.38	28.36	26.75	26.96	24.36	23.64	23.39	23.38	23.44	4
5	26.69	30.42	27.50	29.08	28.90	27.47	24.92	24.40	23.58	23.44	23.33	24.20	5
6	26.30	28.61	27.94	27.48	29.10	27.90	25.22	24.36	23.82	23.57	23.67	24.92	6
7	26.22	27.66	26.13	27.88	28.90	28.29	25.51	24.38	24.00	23.55	23.66	25.27	7
8	26.15	27.50	28.12	29.43	28.85	28.43	25.69	24.32	23.79	23.66	23.30	25.32	8
9	26.07	27.61	26.10	29.36	28.21	28.08	26.21	24.40	23.66	23.50	23.28	25.01	9
10	25.74	27.61	28.04	29.53	27.99	27.46	26.10	24.27	23.56	23.38	23.39	25.00	10
11	25.63	27.60	28.08	29.64	28.48	27.96	25.64	24.35	24.02	23.45	23.41	25.15	11
12	25.85	27.56	28.11	29.05	28.62	28.62	25.17	24.32	24.33	23.71	23.29	25.13	12
13	25.75	27.55	28.12	27.48	28.15	27.22	24.95	24.28	24.10	23.69	23.44	25.46	13
14	25.31	27.53	28.10	27.70	28.65	28.20	24.82	24.45	24.15	23.53	23.40	25.40	14
15	24.71	27.42	28.12	29.43	30.20	28.36	24.68	24.60	24.59	23.28	23.23	25.09	15
16	25.24	27.50	28.11	29.70	29.04	27.28	24.57	24.34	24.57	23.44	23.22	25.08	16
17	27.41	27.56	27.58	29.78	27.81	27.69	24.51	24.28	24.79	23.40	23.30	24.83	17
18	27.63	27.55	26.80	29.85	26.83	27.41	24.56	24.33	24.78	23.38	23.40	24.87	18
19	27.60	27.61	26.62	29.33	27.46	27.33	24.56	24.26	24.56	23.42	24.33	25.10	19
20	27.58	27.47	26.54	27.48	28.32	28.35	24.61	24.22	23.90	23.37	24.58	25.37	20
21	27.83	27.28	26.90	28.00	28.36	28.72	24.58	24.34	23.59	23.37	23.96	25.09	21
22	28.25	27.26	26.58	29.59	28.38	28.87	24.46	24.22	23.59	23.24	23.51	24.96	22
23	29.70	27.20	25.85	29.82	27.67	29.52	24.42	24.22	23.49	23.40	23.49	25.05	23
24	30.41	27.20	26.00	29.87	26.48	28.15	24.43	24.27	23.66	24.28	23.39	25.50	24
25	30.53	27.20	27.03	29.72	26.93	28.08	24.56	24.38	23.47	24.17	23.33	25.75	25
26	30.50	27.19	26.85	28.87	27.62	28.73	24.43	24.27	23.36	23.96	23.31	26.07	26
27	30.25	27.16	27.32	27.11	26.93	27.85	24.56	24.21	23.41	23.97	23.41	26.18	27
28	30.10	27.01	28.84	27.94	26.01	27.05	24.47	24.17	23.41	23.63	23.40	25.89	28
29	30.15	26.86	28.63	29.59	26.67	24.36	24.50	23.42	23.47	23.24	23.41	25.41	29
30	30.24	26.80	27.29	29.84	26.60	24.35	24.73	23.36	23.40	23.24	23.24	25.09	30
31	30.10		27.60	29.87		26.66		24.83		23.35	23.29		31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED			11-03-74	2115	31.04						

NR — NO RECORD
NE — NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 36 12	121 07 50	NW 7 4S 8E	46.65	12- 9-50	1930-DATE				1959	0.00	USED
			43.15a	12- 9-50				1960	0.00	USCGS	
			37900b	42.86	1-27-69			1960	3.50	USED	

Station located at highway bridge, 3.35 miles above mouth. Backwater at times, from the San Joaquin River, affects the stage-discharge relationship. Drainage area is 1,896 square miles. Flows regulated by upstream reservoirs and diversions.

a Reflects present datum.

b Maximum discharge since Department of Water Resources began operation of station in April 1966.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
 (IN FEET)

	WATER YEAR	STATION NO.	STATION NAME
	1975	B07040	SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY																										
1	17.74	18.88	17.37	17.72	18.62	17.27	20.01	15.83	17.99	15.52	14.48	15.15	1																										
2	17.74	19.10	17.52	17.34	18.46	17.29	19.44	15.67	18.76	15.30	14.40	15.05	2																										
3	17.37	19.47	17.77	16.71	17.57	17.37	18.67	15.67	19.34	15.23	14.45	15.10	3																										
4	17.27	19.46	18.25	17.92	17.97	17.21	18.04	16.25	20.07	15.23	14.57	15.06	4																										
5	17.15	19.45	18.18	18.03	19.31	17.68	17.71	16.66	20.13	15.26	14.47	15.43	5																										
6	16.83	18.65	18.41	17.45	20.23	18.01	17.65	16.58	19.81	15.34	14.44	15.88	6																										
7	16.89	17.83	18.69	16.81	20.77	18.50	17.82	16.81	20.09	15.30	14.54	16.14	7																										
8	16.66	17.64	18.72	18.01	21.00	18.92	18.03	16.89	20.25	15.17	14.55	16.27	8																										
9	16.58	17.67	18.65	18.08	20.91	19.10	18.57	16.83	20.61	15.19	14.54	16.13	9																										
10	16.33	17.67	18.54	18.16	20.63	19.12	18.75	16.76	20.80	15.08	14.57	16.03	10																										
11	16.22	17.64	18.48	18.31	20.72	19.13	18.74	16.52	20.75	14.86	14.68	16.27	11																										
12	16.61	17.63	18.46	18.22	20.89	19.71	18.59	16.43	20.34	14.89	14.63	16.37	12																										
12	16.80	17.66	18.44	17.49	20.93	19.57	18.35	16.28	19.35	14.90	14.53	16.59	13																										
14	16.74	17.67	18.42	16.91	21.56	19.47	18.12	16.53	19.64	14.83	14.47	16.60	14																										
15	16.41	17.60	18.43	18.01	22.36	20.08	17.82	16.74	20.45	14.74	14.43	16.64	15																										
16	16.22	17.61	18.42	18.27	22.04	19.90	17.44	16.90	20.80	14.75	14.44	16.69	16																										
17	16.97	17.62	18.25	18.40	21.37	19.88	17.01	17.02	20.90	14.92	14.68	16.60	17																										
18	17.15	17.60	17.75	18.44	20.61	19.96	16.91	17.24	21.02	14.92	15.23	16.58	18																										
19	17.08	17.60	17.51	18.26	20.30	19.75	16.83	17.30	20.78	15.05	15.88	16.58	19																										
20	16.97	17.57	17.36	17.57	20.41	20.08	16.93	17.38	19.62	15.08	15.96	16.77	20																										
21	17.06	17.40	17.34	16.96	20.12	20.30	17.01	17.55	17.75	15.01	15.79	16.73	21																										
22	17.17	17.34	17.16	18.28	19.78	20.31	16.84	17.62	16.98	14.75	15.71	16.73	22																										
22	17.85	17.26	16.58	18.55	19.45	20.69	16.74	17.49	16.65	14.56	15.76	16.77	23																										
24	18.47	17.24	16.36	18.65	18.77	20.52	16.56	17.42	16.39	14.72	15.68	16.92	24																										
25	18.67	17.30	16.79	18.62	18.47	20.18	16.40	17.52	16.24	14.95	15.48	17.06	25																										
26	18.75	17.33	16.98	18.31	18.92	20.62	16.36	17.51	16.05	14.67	15.13	17.28	26																										
27	18.68	17.37	16.65	17.48	18.44	20.60	16.42	17.54	15.93	14.71	15.03	17.35	27																										
28	18.66	17.36	17.68	17.02	17.67	20.37	16.41	17.54	15.81	14.53	14.98	17.34	28																										
29	18.77	17.32	17.79	18.20	20.32	16.20	17.51	15.79	14.50	14.87	17.23	29	30	18.93	17.23	17.34	18.47	20.46	15.96	17.55	15.72	14.51	14.87	17.15	30	31	18.95		16.78	18.57		20.50		17.63		14.59	15.07		31
30	18.93	17.23	17.34	18.47	20.46	15.96	17.55	15.72	14.51	14.87	17.15	30																											
31	18.95		16.78	18.57		20.50		17.63		14.59	15.07		31																										

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2-15-75	1035	22.40									
NR — NO RECORD											
NE — NO FLOW											

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	I 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 38 28	121 13 37	SW29 3S 7E	45,550	38.3la	1-27-69	JAN 50-MAR 52 OCT 65-DATE	SEP 43-DEC 49 APR 52-SEP 65	1943 1959	1959 1959	0.00 0.00	USED USCGS
										3.41	USED

Station located at State Highway 132 Bridge, 13 miles west of Modesto, 2 miles upstream from mouth of the Stanislaus River. Gage height-discharge relation affected by backwater from the Stanislaus River during high flows in the Stanislaus. Flows regulated by upstream reservoirs and diversions. Drainage area is 12,400 square miles.

a This maximum gage height of record does not represent the maximum discharge of record as the station was affected by backwater from the Stanislaus River.

TABLE B-9 (Cont.)
DAILY MEAN GAGE HEIGHT
 (IN FEET)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY	WATER YEAR	STATION NO	STATION NAME
														1975	803175	STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE
1	1.66	1.87	4.97	2.23	1.54	4.38	5.32	2.27	12.55	1.61	1.77	1.70	1			
2	1.72	1.84	4.98	2.21	1.67	4.37	4.68	3.77	13.50	2.45	1.71	1.71	2			
3	1.70	1.80	5.06	2.25	1.93	3.68	4.18	6.76	12.47	3.16	1.69	1.69	3			
4	1.71	1.81	5.05	2.23	4.01	1.87	3.95	7.45	10.43	2.53	1.71	1.64	4			
5	1.67	1.95	4.91	2.26	6.52	1.72	3.93	7.64	12.36	2.74	1.70	1.67	5			
6	1.68	2.17	4.89	2.30	6.49	1.70	4.16	7.62	11.94	2.52	1.74	1.65	6			
7	1.72	2.21	4.89	2.11	6.31	1.70	4.28	7.81	12.05	3.36	1.69	1.62	7			
8	1.78	2.22	4.87	2.06	6.05	2.34	4.65	7.71	11.98	4.03	1.63	1.64	8			
9	1.72	2.25	4.86	2.04	6.54	4.21	4.77	7.09	11.57	3.18	1.62	1.66	9			
10	1.69	2.26	4.85	2.01	6.62	4.19	4.77	6.21	10.07	2.09	1.66	1.65	10			
11	1.77	2.26	4.84	1.98	6.50	5.12	4.81	6.19	7.69	1.72	1.69	1.62	11			
12	1.79	2.25	4.83	1.99	6.46	6.11	4.81	6.64	5.87	1.75	1.63	1.66	12			
13	1.75	2.25	4.83	1.97	6.84	6.28	4.79	7.27	8.45	1.73	1.62	1.63	13			
14	1.68	2.25	4.81	1.98	6.57	6.34	4.33	6.93	9.44	1.70	1.64	1.62	14			
15	1.68	2.26	4.80	1.97	6.45	6.13	3.81	7.04	9.41	1.75	1.63	1.60	15			
16	1.61	2.26	4.81	1.95	6.42	6.61	3.44	7.03	9.45	1.81	1.62	1.62	16			
17	1.62	2.25	4.80	1.94	6.40	6.15	3.26	7.09	9.19	1.82	1.61	1.60	17			
18	1.61	2.25	4.78	1.96	6.39	6.10	3.13	7.13	8.65	1.77	1.71	1.56	18			
19	1.58	2.21	4.77	1.96	6.39	6.07	2.97	7.28	5.82	1.78	1.75	1.58	19			
20	1.58	2.22	4.39	1.93	6.39	6.06	2.90	7.40	3.35	1.73	1.66	1.64	20			
21	1.64	2.21	3.16	1.98	6.38	6.08	2.90	7.39	2.26	1.72	1.63	1.67	21			
22	1.60	2.40	2.99	1.94	6.36	6.78	3.06	7.29	1.88	1.73	1.62	1.65	22			
23	2.69	3.54	2.96	1.96	6.35	6.17	3.04	7.23	1.77	1.72	1.56	1.65	23			
24	3.02	3.83	2.71	1.95	6.34	6.21	3.06	7.13	1.74	1.65	1.55	1.66	24			
25	3.46	4.20	2.10	1.95	5.91	6.33	3.07	7.24	1.71	1.64	1.56	1.66	25			
26	3.34	4.94	2.03	1.93	4.71	6.15	3.05	7.31	1.70	1.68	1.56	1.61	26			
27	3.35	4.95	2.03	1.95	4.41	6.09	3.05	7.46	1.72	1.70	1.71	1.62	27			
28	3.28	4.96	2.04	1.95	4.40	6.07	3.05	7.52	1.73	1.74	1.74	1.62	28			
29	2.99	4.97	2.17	1.96	5.06	2.87	7.57	1.68	1.73	1.74	1.62	29				
30	1.93	4.99	2.24	1.81	5.79	2.82	7.74	1.62	1.70	1.73	1.65	30				
31	1.91		2.25	1.60	5.42			10.61		1.75	1.68					31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
6-02-75	1815	13.88									

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT DAILY	PERIOD			REF DATUM
			CFS	GAGE HT	DATE			FRDM	TO		
37 47 18	120 45 41	SW 4 2S 11E	62000	31.8	12-23-55	JUN 28-DEC 39					117.21 USCGS
						APR 40-DATE					

Station located at bridge, 5.0 miles east of Oakdale. Flow regulated by reservoirs and powerplants. Drainage area is 1,020 square miles. This station is equipped with radio telemeter.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

	WATER YEAR		STATION NO.	STATION NAME										
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY	
1	37.86	37.88	40.94	37.03	36.50	41.28	42.96	38.79	50.37	38.79	37.62	37.89	1	
2	37.88	37.68	41.03	36.99	36.46	41.25	42.47	38.24	53.02	38.50	37.37	37.44	2	
3	37.63	37.47	41.53	36.96	36.45	41.08	41.76	40.27	54.85	38.66	37.09	37.30	3	
4	37.79	37.36	41.98	36.95	36.59	40.09	41.22	44.12	54.84	39.28	37.28	37.33	4	
5	37.87	37.30	41.63	36.92	39.12	39.42	40.87	45.41	53.37	39.06	37.36	37.02	5	
6	37.31	37.31	41.64	36.90	42.50	39.07	40.78	45.88	54.34	39.45	37.06	37.04	6	
7	37.24	37.50	41.78	36.91	43.15	38.95	41.02	46.57	54.38	39.25	37.26	37.54	7	
8	37.35	37.61	41.82	36.89	43.18	39.10	41.79	46.62	54.44	39.80	37.51	38.07	8	
9	37.29	37.38	41.80	36.91	43.02	39.17	42.54	46.70	54.47	40.54	37.31	37.77	9	
10	37.30	37.15	41.80	36.94	43.77	40.60	42.63	45.77	54.10	39.71	37.51	37.37	10	
11	37.37	37.09	41.80	36.87	43.88	40.84	42.42	44.46	52.78	38.60	37.43	37.32	11	
12	37.65	37.07	41.79	36.85	43.75	42.09	42.16	44.37	49.25	38.23	37.21	37.27	12	
13	38.02	37.06	41.83	36.82	43.88	43.35	42.19	45.05	46.20	38.21	37.19	37.05	13	
14	38.26	36.44	41.88	36.80	44.86	44.43	41.81	45.91	48.94	38.09	37.21	36.87	14	
15	38.31	37.34	41.84	36.79	44.29	44.44	41.03	45.57	50.64	37.87	37.17	37.39	15	
16	37.54	37.81	41.85	36.78	43.95	44.27	40.45	45.60	50.97	37.66	37.10	37.33	16	
17	37.65	37.90	41.87	36.74	43.86	44.70	40.21	45.66	51.10	37.73	37.43	36.94	17	
18	37.37	37.93	41.86	36.73	43.83	44.23	39.82	45.77	50.88	38.03	37.64	37.22	18	
19	37.20	37.99	41.84	36.72	43.83	43.98	39.50	45.88	49.90	37.92	38.26	36.87	19	
20	37.24	37.69	41.83	36.72	43.85	43.94	39.46	46.21	45.54	38.07	38.24	37.66	20	
21	37.32	37.21	41.16	36.70	43.84	43.94	39.52	46.69	42.26	38.03	38.11	37.74	21	
22	37.28	37.13	39.30	36.71	43.82	44.35	39.27	46.47	41.02	37.76	37.88	37.71	22	
23	37.23	37.18	38.75	36.69	43.81	45.00	39.26	46.15	40.35	37.63	37.64	37.22	23	
24	37.69	38.32	38.55	36.68	43.82	44.29	39.34	46.03	40.12	37.52	37.67	37.19	24	
25	38.28	39.03	38.24	36.67	44.15	44.26	39.55	46.12	39.41	37.34	37.20	37.25	25	
26	38.85	39.56	37.64	36.66	43.72	44.44	39.67	46.05	39.08	37.48	37.09	37.10	26	
27	38.61	40.48	37.39	36.63	41.91	44.04	39.61	46.22	39.07	37.43	37.43	37.24	27	
28	38.46	40.70	37.29	36.64	41.44	43.86	39.56	46.35	38.99	37.51	37.52	37.00	28	
29	38.43	40.81	37.21	35.83	43.97	39.41	46.44	39.00	37.52	37.44	37.13	29		
30	38.28	40.88	37.14	36.62	44.40	39.10	46.61	39.06	37.63	37.25	37.21	30		
31	37.86		37.08	36.58		43.80		47.08		37.28	37.74			

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
6-03-75	2230	55.37									
E — ESTIMATED											
NR — NO RECORD											
NE — NO FLOW											

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	I 4 SEC T & R M D B & M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 43 50	121 06 35	SE29 2S 8E	62500	63.25	12-24-55	APR 40-DATE		1940		0.00	USGS
Station located 15 feet downstream from the Southern Pacific Railroad Bridge, 1.0 mile southeast of Ripon. Records furnished by U. S. Geological Survey. Flow records are published in U. S. Geological Survey report "Surface Water Records of California". Drainage area is 1,075 square miles.											

TABLE B-9 (Cont.)
DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR		STATION NO.	STATION NAME										
		1975	BO3115	STANISLAUS RIVER AT KOETITZ RANCH									
DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	29.32	28.78	31.78	28.01	27.18	32.08	33.79	29.99	39.58	29.75	28.77	29.13	1
2	29.15	28.62	31.86	27.96	27.13	32.02	33.24	29.54	41.79	29.54	28.73	28.72	2
3	28.98	28.38	32.24	27.92	27.09	31.89	32.71	30.69	43.68	29.56	28.35	28.35	3
4	28.91	28.23	32.72	27.88	27.18	31.21	32.27	34.44	44.76	30.20	28.50	28.44	4
5	29.07	28.15	32.57	27.87	28.65	30.58	31.87	35.78	43.49	29.93	28.57	28.24	5
6	28.80	28.12	32.43	27.83	32.58	30.23	31.78	36.23	43.62	30.47	28.30	28.31	6
7	28.69	28.27	32.60	27.73	33.56	29.91	32.01	36.80	44.14	30.30	28.39	28.70	7
8	28.75	28.41	32.63	27.59	33.76	30.08	32.67	36.99	44.26	30.52	28.58	29.14	8
9	28.63	28.31	32.63	27.59	33.62	29.97	33.46	37.05	44.31	31.36	28.76	29.05	9
10	28.74	28.00	32.61	27.64	34.18	31.26	33.60	36.42	44.10	30.79	28.81	28.60	10
11	28.81	27.90	32.61	27.58	34.41	31.65	33.43	35.30	43.08	29.82	28.73	28.54	11
12	29.00	27.86	32.59	27.55	34.31	32.55	33.25	35.16	40.08	29.52	28.52	28.48	12
13	29.30	27.84	32.62	27.52	34.37	33.85	33.22	35.49	36.71	29.64	28.61	28.18	13
14	29.50	27.82	32.67	27.50	35.15	34.85	33.01	36.42	38.59	29.33	28.28	28.07	14
15	29.54	27.98	32.64	27.48	34.90	35.10	32.26	36.18	40.31	29.17	28.41	28.44	15
16	28.92	28.53	32.62	27.47	34.51	34.86	31.63	36.23	40.72	29.09	28.43	28.57	16
17	28.70	32.65	27.43	34.41	35.38	31.33	36.18	40.85	28.98	28.65	28.26	17	
18	28.42	28.75	32.63	27.41	34.38	34.90	31.02	36.33	40.69	29.23	28.96	28.21	18
19	28.17	28.80	32.61	27.39	34.36	34.73	30.63	36.35	39.97	29.09	29.27	28.44	19
20	28.12	28.65	32.61	27.40	34.38	34.70	30.54	36.60	36.56	29.26	29.51	28.77	20
21	28.19	28.09	32.23	27.37	34.38	34.70	30.68	37.05	33.37	29.31	29.39	28.85	21
22	28.17	27.94	30.50	27.36	34.36	34.95	30.51	36.88	32.25	29.05	29.27	28.96	22
23	28.08	27.89	29.74	27.35	34.35	35.67	30.45	36.57	31.57	28.94	28.87	28.70	23
24	28.11	28.74	29.49	27.33	34.36	35.08	30.59	36.44	31.28	28.81	29.03	28.50	24
25	28.82	29.76	29.35	27.33	34.57	34.99	30.67	36.56	30.65	28.66	28.67	28.54	25
26	29.63	30.12	28.99	27.31	34.50	35.14	30.81	36.48	30.23	28.58	28.22	28.23	26
27	29.54	31.12	28.55	27.30	32.88	34.83	30.93	36.55	30.10	28.81	28.65	28.43	27
28	29.38	31.45	28.34	27.27	32.24	34.56	30.71	36.73	30.11	28.94	28.81	28.23	28
29	29.34	31.61	28.23	27.29	34.56	30.50	36.71	30.16	28.84	28.69	28.46	29	
30	29.21	31.70	28.15	27.27	35.11	30.32	36.86	30.08	28.83	28.49	28.47	30	
31	28.86		28.08	27.24		34.74		37.15		28.79	28.81		31

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED			6-04-75	1015	44.93						
NR — NO RECORD											
NE — NO FLOW											

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1 4 SEC. T. & R M D B A M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 41 57	121 10 08	SW 2 3S 7E	50.5	12-24-55	OCT 62-DATE	MAR 50-SEP 62	1950 1962	-0.63	USC&GS		
							1963 1969	0.37	USC&GS		
							1970	0.00	USC&GS		

Station located on left bank 9.35 miles upstream from mouth, 0.6 mile northwest of Bacon and Gates Road Junction, 3.7 miles southwest of Ripon. It is possible that backwater from San Joaquin River could affect the stage-discharge relationship. Flow regulated by upstream reservoirs and diversions. Drainage area is 1,094 square miles.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

	WATER YEAR	STATION NO.	STATION NAME
	1975	B07020	SAN JOAQUIN RIVER NEAR VERNALIS

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY																											
1	13.67	14.71	13.77	13.34	14.14	13.74	16.38	12.11	14.98	11.67	10.65	11.31	1																											
2	13.74	14.83	13.93	13.21	14.09	13.66	15.79	11.92	15.85	11.59	10.59	11.12	2																											
3	13.44	15.14	14.16	12.44	13.03	13.76	15.07	11.88	16.49	11.49	10.59	11.10	3																											
4	13.25	15.24	14.64	13.45	13.36	13.46	14.42	12.86	17.20	11.59	10.67	11.00	4																											
5	13.16	15.18	14.57	13.70	14.67	13.66	14.05	13.55	17.39	11.63	10.62	11.26	5																											
6	12.90	14.58	14.62	13.30	15.94	13.85	13.93	13.58	16.99	11.73	10.50	11.60	6																											
7	12.74	13.78	14.90	12.53	16.75	14.24	14.10	13.83	17.22	11.71	10.58	11.95	7																											
8	12.71	13.58	14.96	13.56	17.06	14.63	14.28	14.00	17.38	11.53	10.64	12.12	8																											
9	12.65	13.57	14.92	13.65	17.03	14.86	14.88	13.94	17.65	11.68	10.69	12.06	9																											
10	12.46	13.55	14.82	13.75	16.74	15.00	15.11	13.89	17.83	11.62	10.72	11.89	10																											
11	12.25	13.50	14.77	13.87	16.81	15.07	15.10	13.56	17.75	11.27	10.82	12.08	11																											
12	12.58	13.49	14.75	13.88	16.98	15.61	14.96	13.44	17.34	11.17	10.76	12.20	12																											
13	12.80	13.50	14.72	13.34	16.95	15.79	14.74	13.30	16.10	11.16	10.63	12.46	13																											
14	12.80	13.53	14.71	12.56	17.56	15.73	14.54	13.58	16.17	11.08	10.55	12.50	14																											
15	12.68	13.47	14.72	13.52	18.40	16.31	14.20	13.75	17.07	10.98	10.48	12.49	15																											
16	12.36	13.51	14.72	13.84	18.28	16.26	13.79	13.90	17.53	10.96	10.49	12.64	16																											
17	12.78	13.57	14.61	13.95	17.71	16.20	13.33	14.02	17.62	11.09	10.70	12.50	17																											
18	13.02	13.57	14.20	14.00	17.01	16.35	13.17	14.20	17.78	11.12	11.27	12.45	18																											
19	12.93	13.57	13.96	13.90	16.64	16.05	13.02	14.31	17.59	11.24	11.85	12.48	19																											
20	12.82	13.56	13.82	13.37	16.76	16.30	13.05	14.32	16.59	11.26	12.06	12.67	20																											
21	12.85	13.35	13.75	12.61	16.55	16.53	13.13	14.54	14.51	11.23	11.89	12.72	21																											
22	12.93	13.24	13.46	13.74	16.27	16.56	12.99	14.64	13.55	11.02	11.78	12.72	22																											
23	13.45	13.18	12.79	14.07	15.99	16.96	12.83	14.54	13.14	10.76	11.77	12.68	23																											
24	14.07	13.18	12.46	14.20	15.41	16.94	12.72	14.45	12.82	10.78	11.73	12.76	24																											
25	14.35	13.38	12.73	14.19	15.03	16.48	12.61	14.51	12.62	11.02	11.57	12.82	25																											
26	14.56	13.48	12.94	13.97	15.47	16.84	12.62	14.57	12.32	10.79	11.11	13.02	26																											
27	14.57	13.64	12.49	13.30	15.00	16.91	12.69	14.53	12.17	10.88	11.02	13.07	27																											
28	14.52	13.74	13.32	12.62	14.20	16.67	12.71	14.58	12.11	10.79	11.03	13.06	28																											
29	14.62	13.74	13.53	13.68	16.57	12.51	14.57	12.07	10.69	10.92	13.02	29	30	14.77	13.67	13.21	13.98	16.74	14.62	12.28	14.62	12.04	10.71	10.88	12.93	30	31	14.82	12.53	14.11		16.83			14.70		10.75	11.06		31
30	14.77	13.67	13.21	13.98	16.74	14.62	12.28	14.62	12.04	10.71	10.88	12.93	30																											
31	14.82	12.53	14.11		16.83			14.70		10.75	11.06		31																											

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
E — ESTIMATED			2-15	1845	18.60						

NR — NO RECORD

NE — NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B. & M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM	
			CFS	GAGE HT.	DATE			FROM	TO			
37 40 34	121 15 55		79000	27.75	12-9-50	JUL 22-DEC 23			1931	1959	8.4	USED
			32,81a	12-9-50	JAN 24-FEB 25							
			52600	34.55	1-27-69	JUN 25-OCT 28			1931	1959	5.06	USCGS
						MAY 29-DATE			1959		0.00	USCGS

Station located on left bank 20 feet downstream from the Durham Ferry Highway Bridge, 2.4 miles downstream from the Stanislaus River 3.4 miles northeast of Vernalis. Drainage area is approximately 13,540 square miles. Natural flow of stream affected by storage reservoirs, power developments, ground water withdrawals and diversions for irrigation. Low flows consist mainly of return flow from irrigation. This station is operated under the Federal-State Cooperative Program. Equipped with DWR radio telemeter. The records are furnished by the U. S. Geological Survey.

a Reflects present datum. The gage height of 32.81 feet does not represent the maximum discharge of 79,000 cfs as water was bypassing the station through levee breaks upstream from station.

TABLE B-10
CORRECTIONS AND REVISIONS
TO
PREVIOUSLY PUBLISHED REPORTS

This table shows corrections and revisions to surface water measurement data of the Bulletin No. 130 series and Bulletin No. 23 series not previously published.

For other corrections and revisions to previously published reports dating back to 1924, refer to Page 160, Table B-11, Bulletin No. 130-66, Volume IV.

TABLE B-10 (Cont.)

CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS

PAGE	MILE & BANK	LOCATION OF ERROR NAME	ITEM	CHANGE	
				FROM	TO
132		Bulletin No. 23-58 <u>Surface Water Flow for 1958</u> Table 149 San Joaquin River at Whitehouse	July acre-feet Water Year Total	247300 1292000	24730 1069000
B-19		Bulletin No. 130-63 Hydrologic Data 1963 <u>Volume IV, San Joaquin Valley</u> Table B-9 Miami Creek near Oakhurst	Maximum Discharge 1963 Water Year	1140E	804
B-29		Table B-19 Bear Creek near Cathay	Maximum Discharge flow 1963 Water gage ht. Year	3850E 9.98	4170E 10.07
B-98	8 (12.00- 13.75)	Table B-87 Tranquillity Irrigation District	Maximum Discharge flow of record gage ht.	3850E 9.98	4170E 10.07
			Diversions Oct. Nov. Dec. Jan. Feb. March April May June July Aug. Sept. Total	204 1777 4066 4112 383 2291 7200 557 6306 6659 1414 14324	52 2005 4112 383 2291 7200 7454 6659 1414 31774
68		Bulletin No. 130-64 Hydrologic Data 1964 <u>Volume IV, San Joaquin Valley</u> Table B-4 Miami Creek near Oakhurst	Maximum Discharge of record	1140E	804
78		Table B-4 Bear Creek near Catheys Valley	Maximum Discharge flow of record gage ht.	3850E 9.98	4170E 10.07
61		Bulletin No. 130-65 Hydrologic Data 1965 <u>Volume IV, San Joaquin Valley</u> Table B-5 Miami Creek near Oakhurst	Maximum Discharge of record	1140E	804
72		Table B-5 Bear Creek near Catheys Valley	Maximum Discharge flow of record gage ht. date	4166E 9.97 1-7-65	4170E 10.07 2-1-63
82		Table B-5 Orestimba Creek near Crows Landing	Daily Mean Discharge Jan. 8 9 10 11 12 13 14 15 16 17	0.0 0.0 A NR 0.0 C NR 0.0 K NR 0.0 W NR 0.0 A NR 0.0 T NR 0.0 E NR 0.0 R NR 0.0 NR	
115	112.55R	Table B-7 Diversions - San Joaquin River	L. A. Thompson	Delete Entire Line	
117	233.63L	Table B-7 United Packing Company	Diversions	Total omitted in 1965	700
76		Bulletin No. 130-66 Hydrologic Data 1966 <u>Volume IV, San Joaquin Valley</u> Table B-4 Bear Creek near Catheys Valley	Maximum Discharge flow of record gage ht. date	4166E 9.97 1-7-65	4170E 10.07 2-1-63
78		Table B-4 Burns Creek at Hornitos	Maximum Discharge 1966 Water Year	1330E	2020E

TABLE B-10 (Cont.)

CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS

PAGE	MILE & BANK	LOCATION OF ERROR NAME	ITEM	CHANGE		
				FROM	TO	
86		Table B-4 Merced River at Cressey	Minimum discharge 1966 Water Year	Month	7 8	
130		Table B-7 Turlock Irrigation District	Total acre-feet diverted - January	18033	1833	
			Average cubic feet per second	293	29.8	
			Monthly use in percent of seasonal	3.5	0.4	
			Total Diversion	516577	500377	
			Average cubic feet per second	714	691	
133		Table B-9 Exports from Tuolumne River	Total acre-feet	Oct. Nov. Dec. Jan. Feb. March April May June July Aug. Sept. Total	15655 12685 14987 7812 11913 15566 11060 15208 18388 21398 21312 19498 185482	15696 12721 15023 7851 11946 12607 11106 15260 18438 21462 21379 19552 183041
		* Bulletin No. 130-67 Hydrologic Data 1967 Volume IV, San Joaquin Valley				
122	255.34R	Table B-6 Sycamore Island Stock Ranch 5	Diversions	Sept. Total	40 278	17 255
		Bulletin No. 130-68 Hydrologic Data 1968 Volume IV, San Joaquin Valley				
104		Table B-5 Laguna Water District	Diversions	May June July Aug. Total	90 110 110 90 400	
107	1.9 L 2.9 L	Table B-5 J. V. Steenstrup Estate	Name	J. V. Steen- strup Estate	John & Robert Boegetti	
		Bulletin No. 130-69 Hydrologic Data 1969 Volume IV, San Joaquin Valley				
54		Table B-4 San Joaquin River near Dos Palos	Maximum Discharge 1969 Water Year	Month Day Time Gage Ht. Flow	3 11 2300 10.42 5560	6 16 0800 10.38 5900
78		Table B-4 Merced River below Snelling	Daily Mean Discharge Jan. 21		946	980
			Monthly Mean		189	190
			Monthly acre-feet		11620	11680
87		Table B-4 San Joaquin River at Maze Road Bridge	Maximum Discharge 1969 Water Year	Discharge Gage Ht. Time	42800 36.46 0400	45550 36.87 0300
			Maximum Discharge of record	CFS Gage Ht.	42800	45550
			Last line	Feet Hours Date	36.46 37.00 2400 2-28-69	36.87 38.31 2000 1-27-69
95		Table B-4 Tule River below Porterville	Maximum Discharge 1969 Water Year	Discharge Gage Ht. Month Day Time		3066 5.35 2 26 1200
130		Table B-12 San Joaquin River at Fremont Ford Bridge	Maximum Discharge of Record	CFS Gage Ht. Date Footnote a	8260b 68.02 2-27-69	9180b 68.05 2-26-69 Delete Entire Note

* Additional corrections for 1967 are listed on page 121

TABLE B-10 (Cont.)

CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS

PAGE	MILE & BANK	LOCATION OF ERROR NAME	ITEM	CHANGE	
				FROM	TO
133		Table B-12 San Joaquin River near Newman	Maximum Discharge of Record CFS	33300a	34700a
140		Table B-12 San Joaquin River at Maze Road Bridge <u>Bulletin No. 130-70 Hydrologic Data 1970 Volume IV, San Joaquin Valley</u>	Maximum Discharge Gage Ht. of Record Date	37.00a 2-28-69	38.31a 1-27-69
95		Table B-4 Woods-Central Ditch near Porterville	Daily Mean Discharge Monthly Acre-feet Water Year Total	June 5 7604 43386	132.0 7397 43179
102		Table B-6 Firebaugh Canal Company Firebaugh Canal Company Fremont Ford Bridge to Gravelly Ford	Diversion for April Total Diversion for Year Total for Reach	9657 51595 897796	7370 49308 895509
108		Table B-6 Woods-Central Ditch	Diversions June Total	7604 43386	7397 43179
117		Table B-11 San Joaquin River at Fremont Ford Bridge	Maximum Discharge CFS Gage Ht. Date Footnote a	8260b 68.02 2-27-69 Delete Entire Note	9180b 68.05 2-26-69
120		Table B-11 San Joaquin River near Newman <u>Bulletin No. 130-73 Hydrologic Data 1973 Volume IV, San Joaquin Valley</u>	Maximum Discharge of Record CFS	33300a	34700a
78		Table B-3 Friant-Kern Canal Delivery to Tule River <u>Bulletin No. 130-67 Hydrologic Data 1967 Volume IV, San Joaquin Valley</u>	Discharge March April	Monthly Acre-feet 3906 0	0 3906
128		Merced Irrigation District, Main Canal Table B-7 Diversion and Acreage Irrigated East Side Canals and Irrigation Districts <u>Sacramento-San Joaquin Water Supervisor</u> Bulletin No. 23-55 for 1955 Table 158 Stanislaus River at Riverbank <u>Bulletin No. 130-67 Hydrologic Data 1967 Volume IV, San Joaquin Valley</u>	Monthly Acre-feet Jan Feb Mar Total Acre-feet	0 0 504 548009	1227 1100 1575 551407
110			Daily Mean Discharge Dec 23 Dec 24	22800 56600	19800 48300
			Monthly Mean Discharge Dec	4853	4489
			Monthly Acre-feet Dec	298400	276000
			Total Acre-feet Year	513424	491024
			Maximum Discharge CFS	85800	61800
96		Table B-4 Stanislaus River at Riverbank	Monthly Acre-feet Jan	93670 97420	68470 91350

APPENDIX C
GROUND WATER MEASUREMENTS

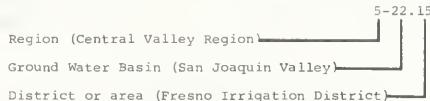
INTRODUCTION

The Department of Water Resources cooperates with the U. S. Geological Survey, U. S. Bureau of Reclamation, irrigation and water storage districts, and other local agencies for the systematic observation of ground water levels. The Department obtains approximately 13,000 water level measurements annually on some 7,500 wells in the San Joaquin Valley. The period of record for these wells varies from one to over 40 years. In preparation of the ground water maps most of the well measurements were used. However, because significant trends in water level fluctuations can be indicated by a representative sample, a selection was made of approximately 500 wells for reporting of actual measurements.

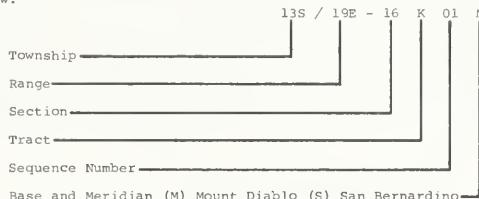
This appendix presents ground water measurement data on these wells for the period October 1, 1974, through September 30, 1975. These wells were selected as being representative of all the wells measured in the area and are designated as selected wells. Their selection is based on a number of factors, including areal distribution, length of water level record, frequency of measurements, conformity with respect to water level fluctuation in the ground water basin or area in a confined aquifer, or in a zone of shallow depth, and availability of a log, mineral analyses, and production record.

Two numbering systems are used by the Department to facilitate processing of water level measurement data. The two systems are the Region and Basin Designation and the State Well Numbering System as described below.

The regions used in this report are geographic areas defined in Section 13040 of the Water Code. That portion of California covered by this volume comprises the southern portion of Central Valley Region No. 5. A decimal system of the form 0-00.00 has been selected according to geographic regions, ground water basins, and district or area as follows:



The State Well Numbering System is based on township, range, and section subdivisions of the Public Land Survey. The number of a well, assigned in accordance with this system, is referred to as the State Well Number, as illustrated below:



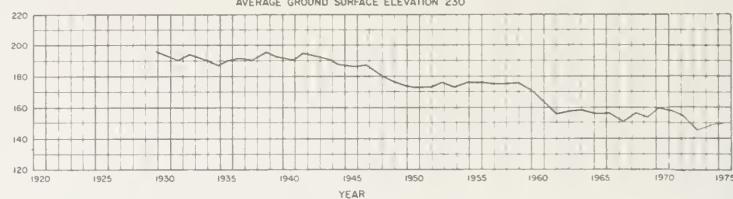
This number identifies and locates the well. In the example, the well is in Township 13 South, Range 19 East, Tract K of Section 16, located in the Mount Diablo Base and Meridian. A section is divided into 40-acre tracts as follows:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

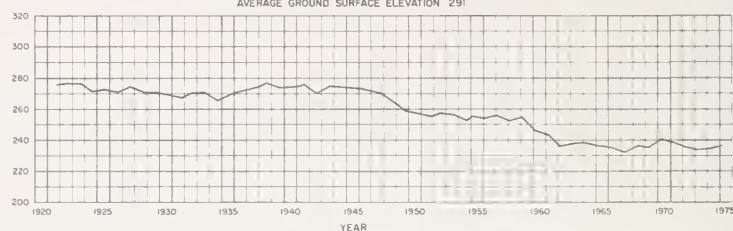
Sequence numbers in a tract are generally assigned in chronological order. The example designates the first well to be assigned a number in Tract K.

Figure C-I. FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS

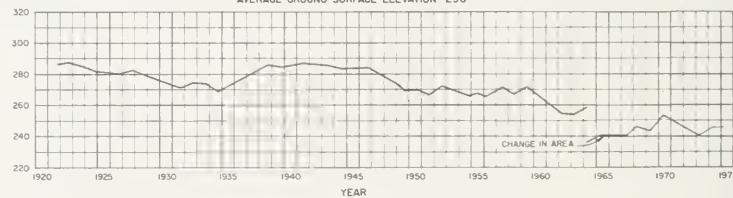
MADERA GROUND WATER AREA
AREA 342.6 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 230'



FRESNO GROUND WATER AREA
AREA 404.0 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 291'



CONSOLIDATED GROUND WATER AREA
AREA 243.0 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 296'



CENTERVILLE BOTTOMS GROUND WATER AREA
AREA 18.15 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 363'

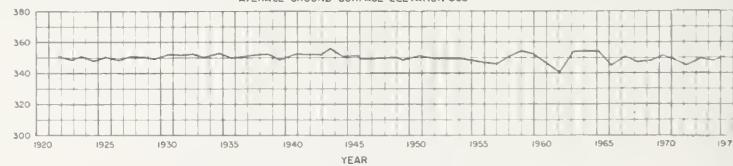


Figure C-I (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS

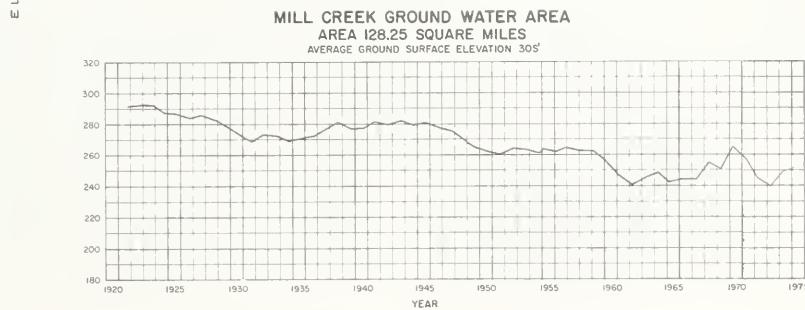
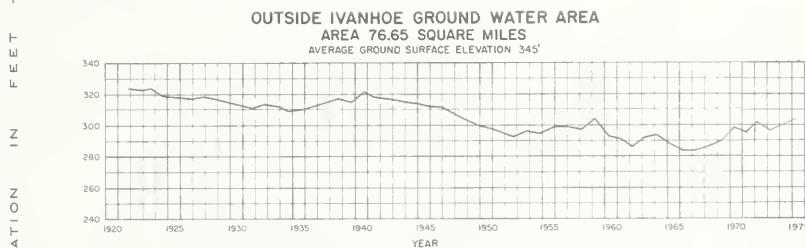
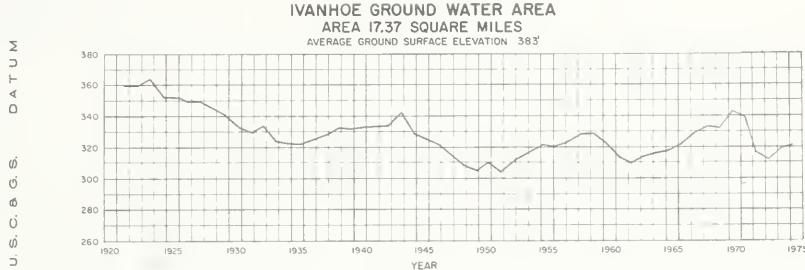
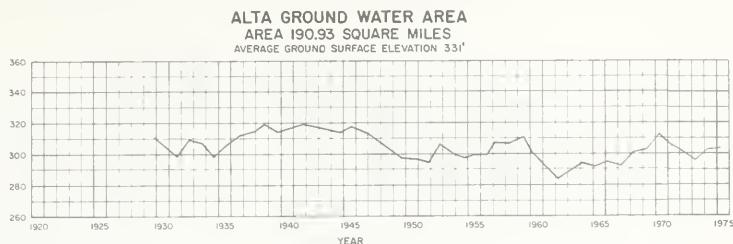


Figure C-I (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS

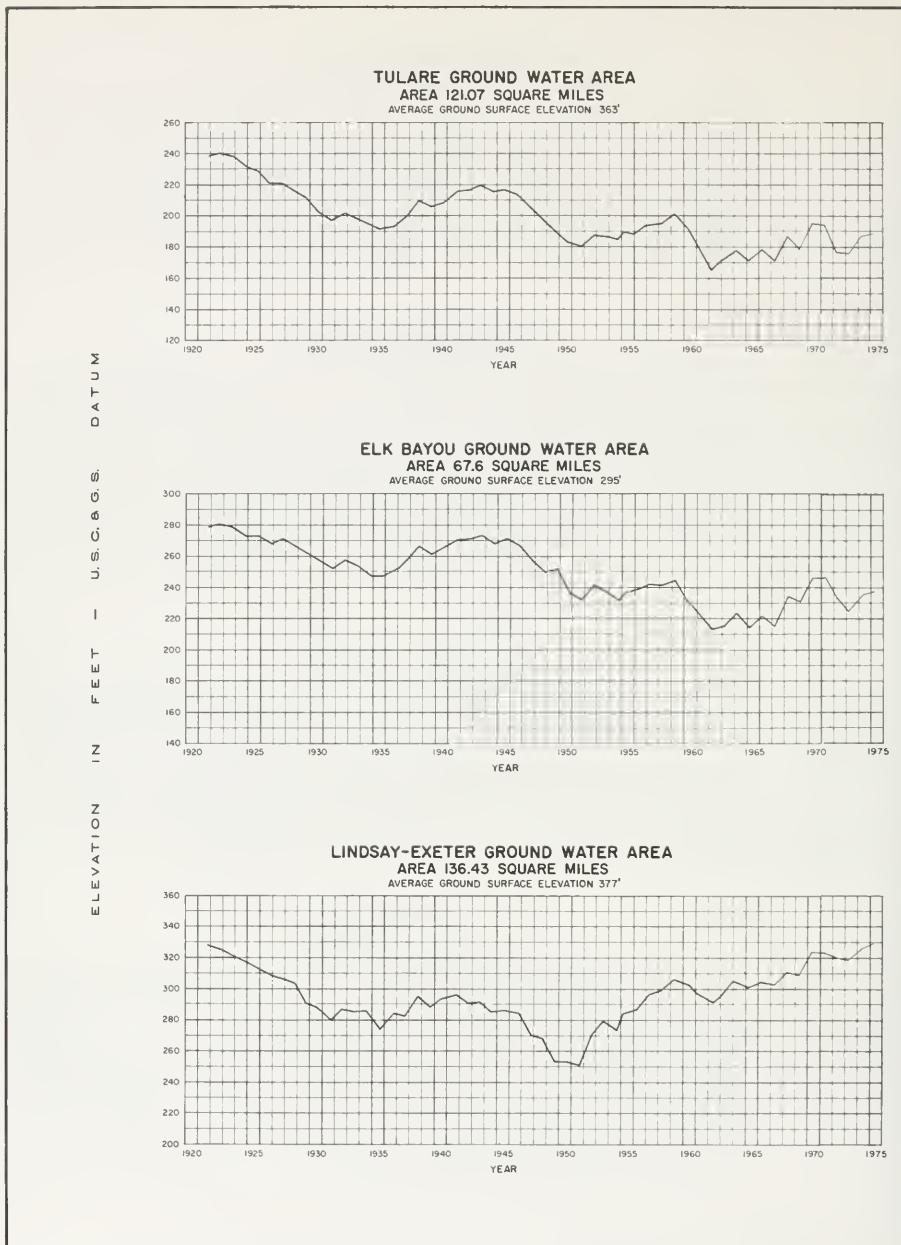
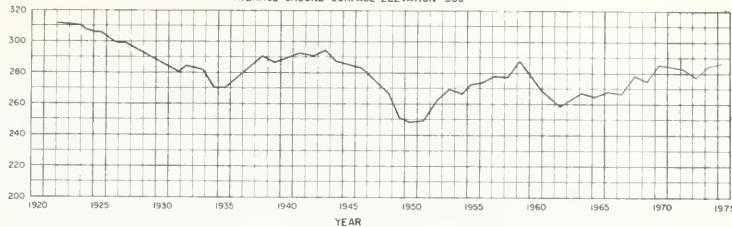


Figure C-1 (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS

TULE RIVER GROUND WATER AREA

AREA 156.6 SQUARE MILES

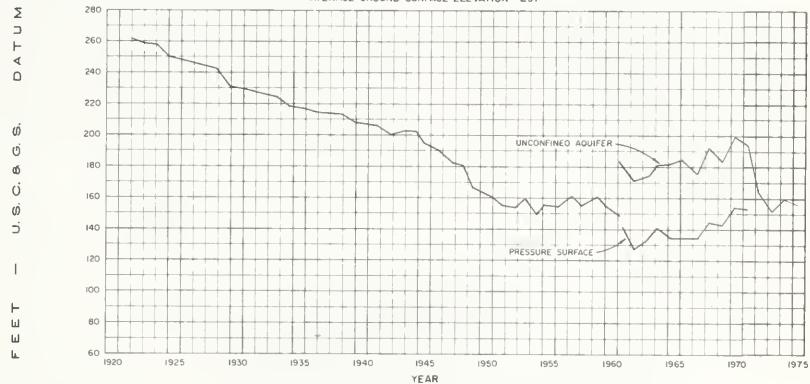
AVERAGE GROUND SURFACE ELEVATION 339'



LOWER DEER CREEK GROUND WATER AREA

AREA 162.22 SQUARE MILES

AVERAGE GROUND SURFACE ELEVATION 297'



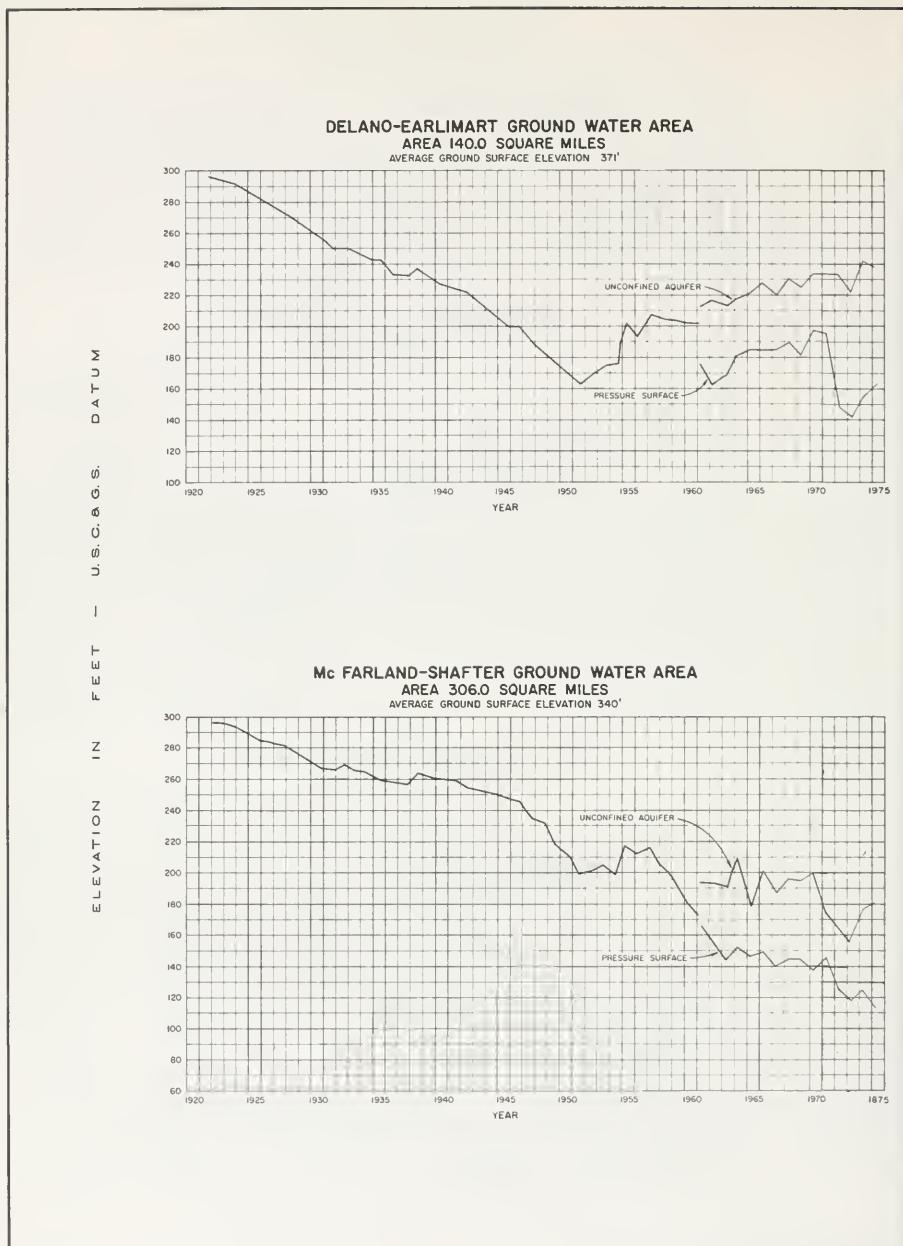
MIDDLE DEER CREEK GROUND WATER AREA

AREA 54.28 SQUARE MILES

AVERAGE GROUND SURFACE ELEVATION 480'



Figure C-I (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS



DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-I (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS

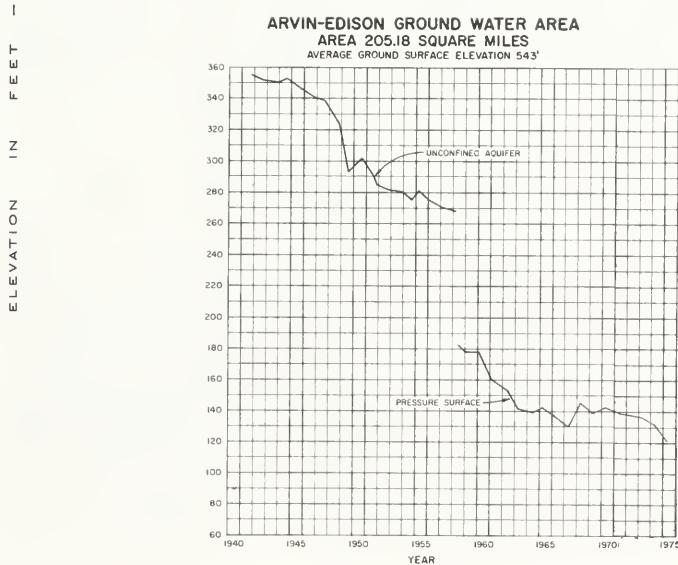
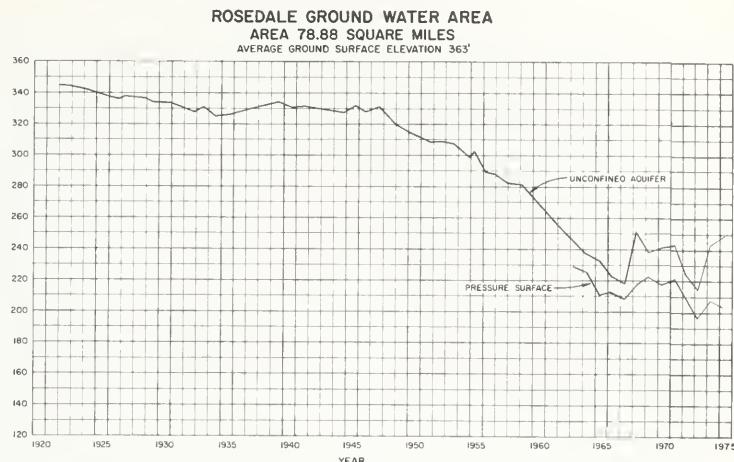
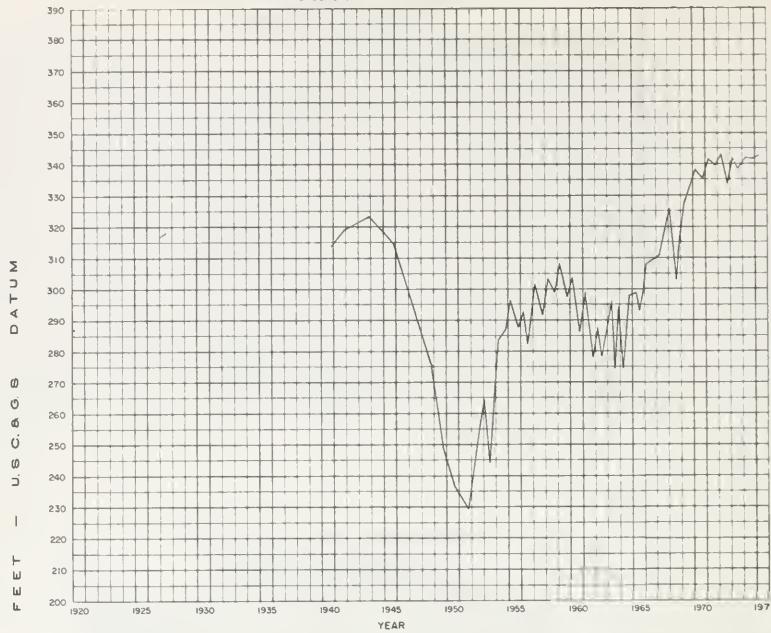


Figure C-2. FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

POTERVILLE IRRIGATION DISTRICT (5-22.29)
WELL 21S/26E -12A1, M.D.B. & M.
GROUND SURFACE ELEVATION 372'



MADERA IRRIGATION DISTRICT (5-22.13)
WELL 11S/17E-27C1, M.D.B. & M.
GROUND SURFACE ELEVATION 250'

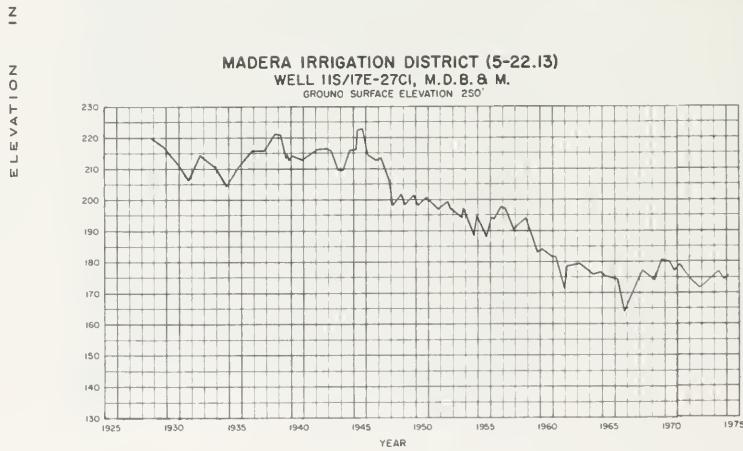
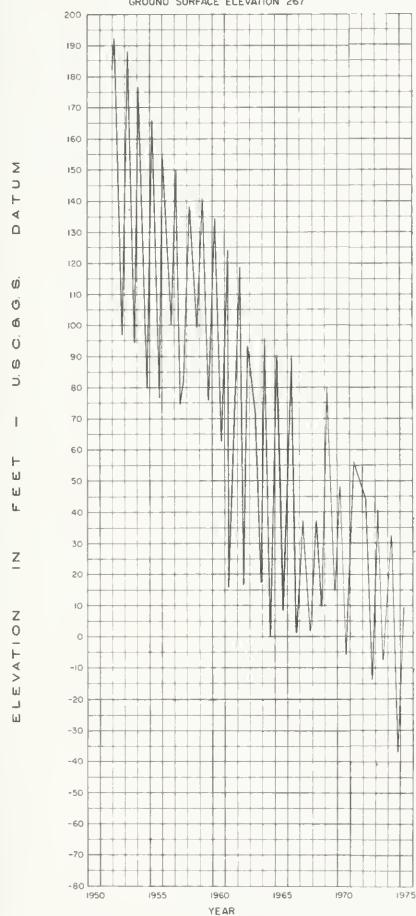
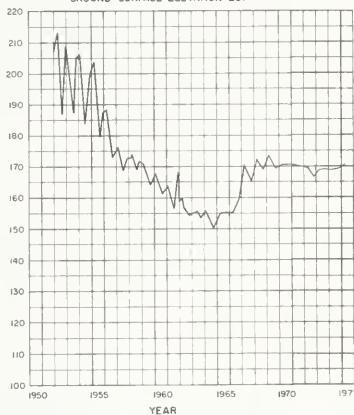


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

SEMITROPIC WATER STORAGE DISTRICT-
DEEP ZONE (5-22.43)
WELL 27S/23E-IR4, M.D.B.& M.
GROUND SURFACE ELEVATION 267'



SEMITROPIC WATER STORAGE DISTRICT-
SHALLOW ZONE (5-22.43)
WELL 27S/23E-IR1, M.D.B.& M.
GROUND SURFACE ELEVATION 267'



MERCED IRRIGATION DISTRICT
(5-22.09)

WELL 7S/1E-1H1, M.D.B.& M.
GROUND SURFACE ELEVATION 118'

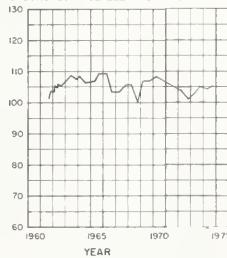
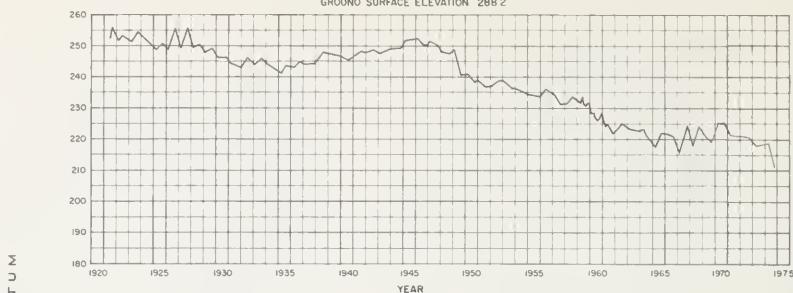


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

FRESNO IRRIGATION DISTRICT (5-22.15)
WELL 13S/19E-901, M.D.B.&M.
GROUND SURFACE ELEVATION 288 2'



NORTH KERN WATER STORAGE DISTRICT (5-22.37)
WELL 27S/25E-22A1, M.D.B.&M.
GROUND SURFACE ELEVATION 392'

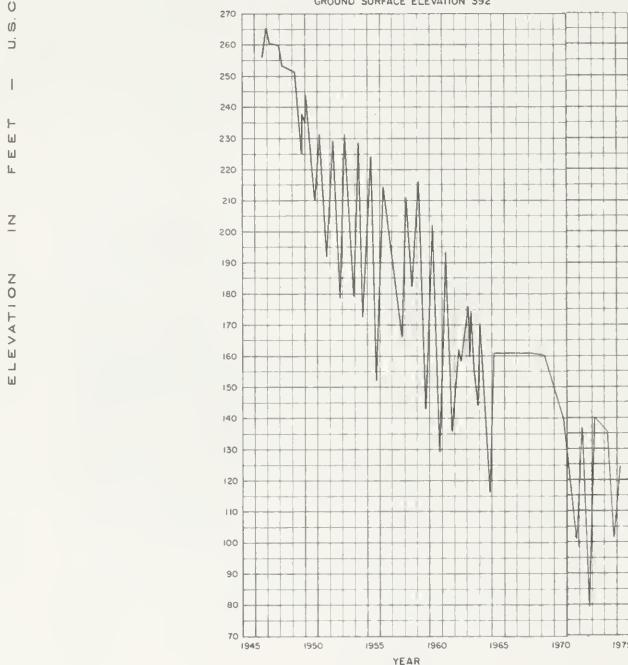


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

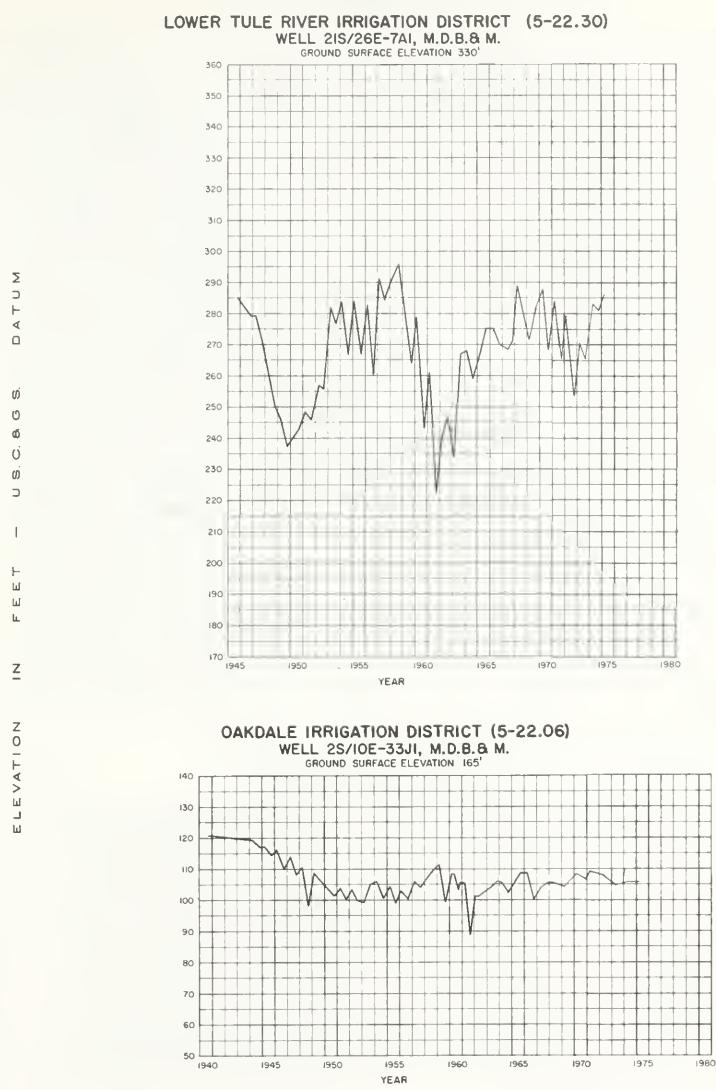
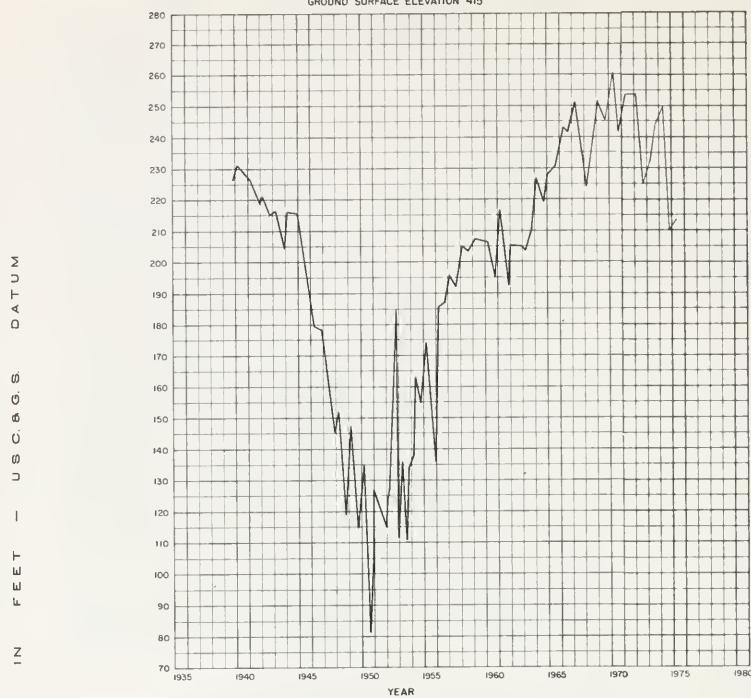


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT (5-22.36)
WELL 25S/26E-2BH2, M.D.B. & M.
GROUND SURFACE ELEVATION 415'



AVENAL-Mc KITTRICK AREA (5-22.44)
WELL 25S/19E-20Q2 M.D.B. & M.
GROUND SURFACE ELEVATION 480'

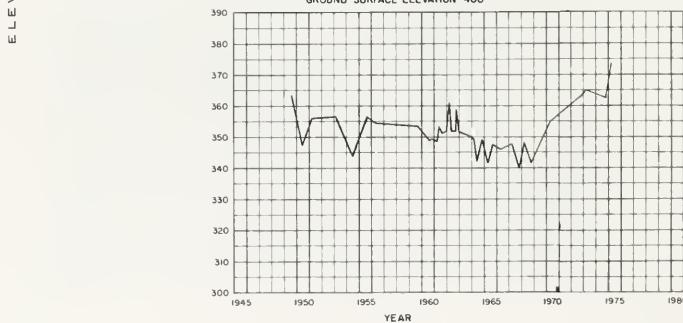


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

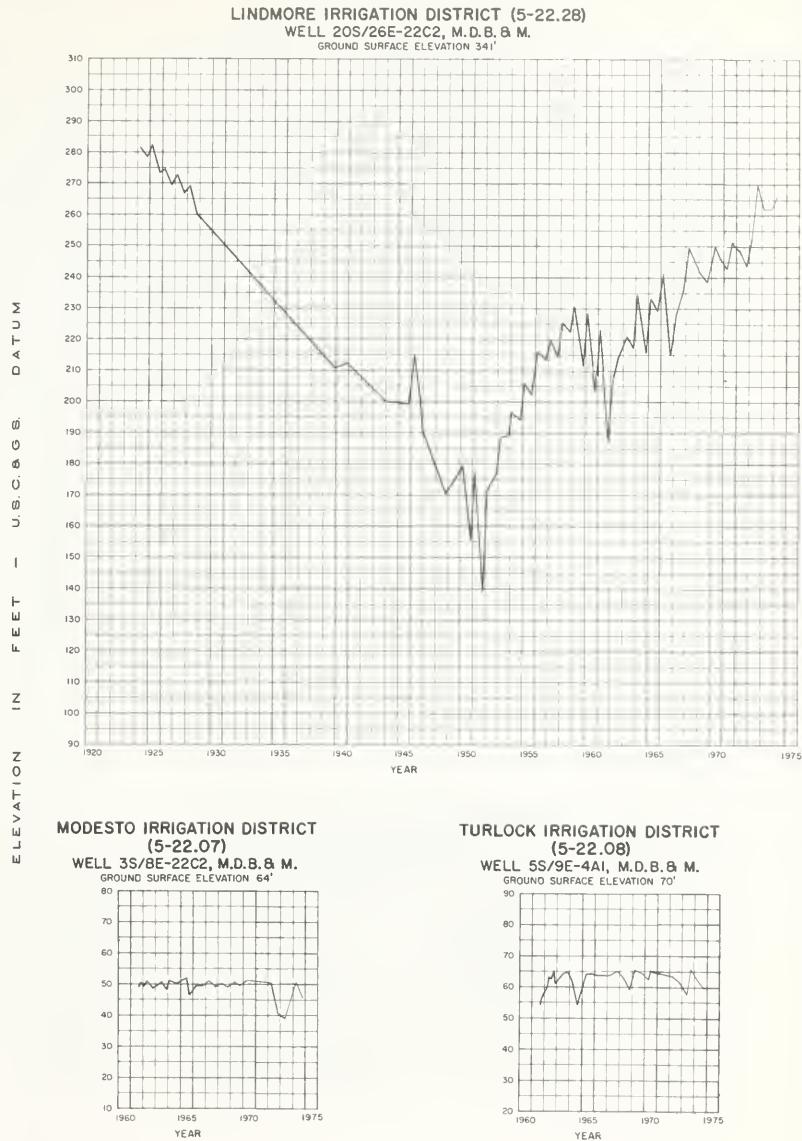
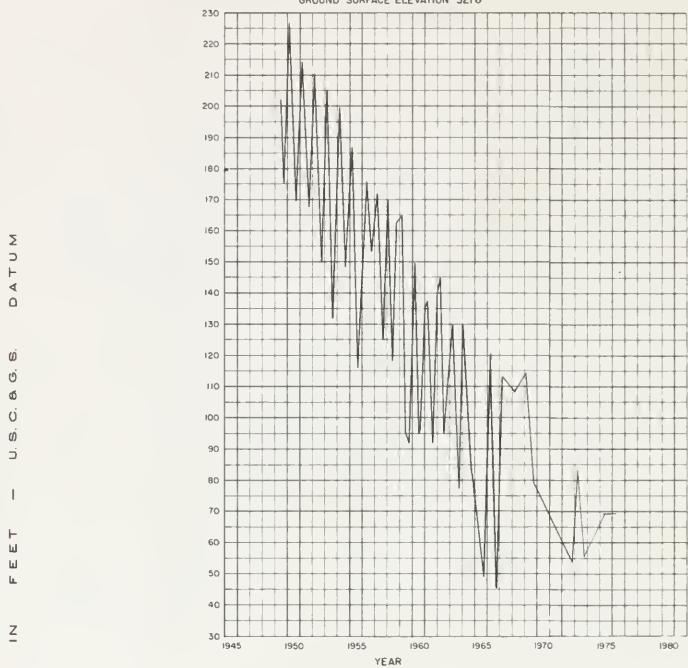


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

SHAFTER-WASCO IRRIGATION DISTRICT (5-22.38)
WELL 27S/24E-35C1, M.D.B.&M.
GROUND SURFACE ELEVATION 3218'



DELTA-MENDOTA AREA-SHALLOW ZONE (5-22.11)
WELL 3S/6E-25D1, M.D.B.&M.
GROUND SURFACE ELEVATION 63.5'

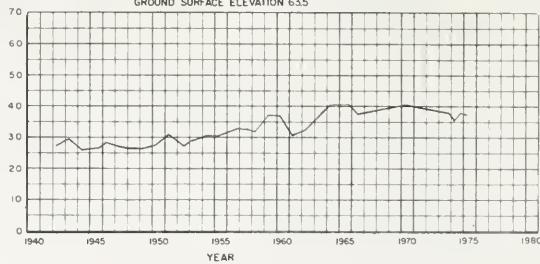


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

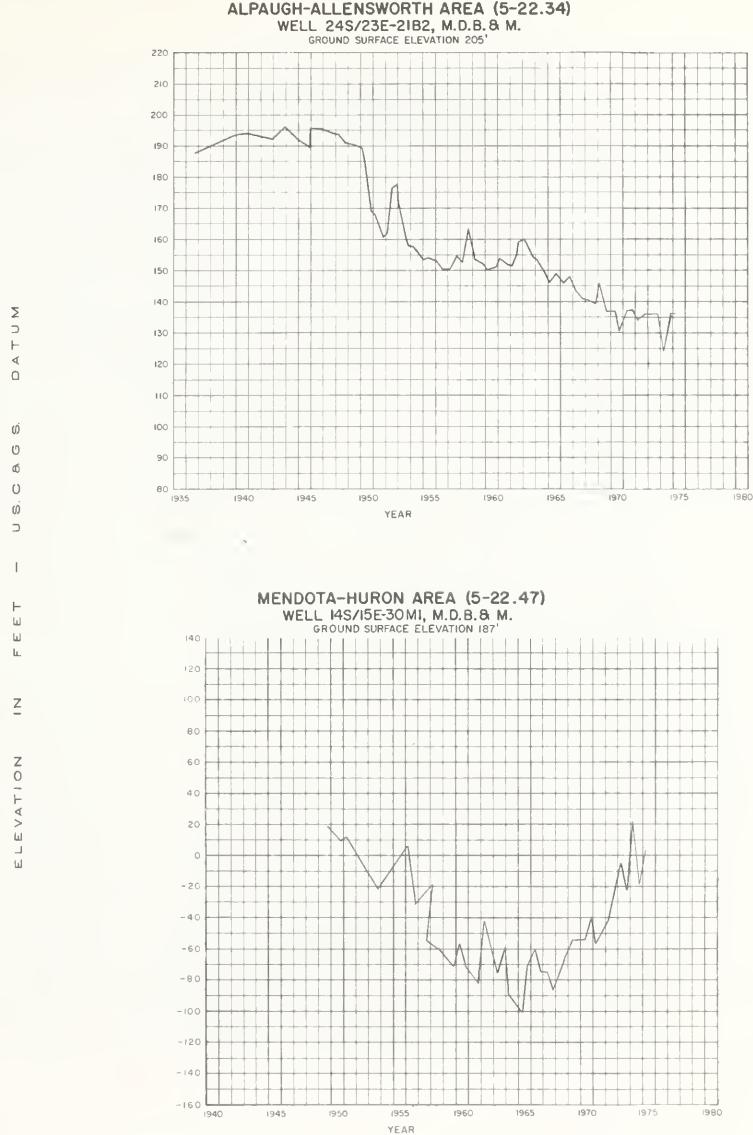


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

DELANO-EARLIMART IRRIGATION DISTRICT (5-22.35)
WELL 24S/26E-32G1, M.D.B.B.M.
GROUND SURFACE ELEVATION 397'



Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

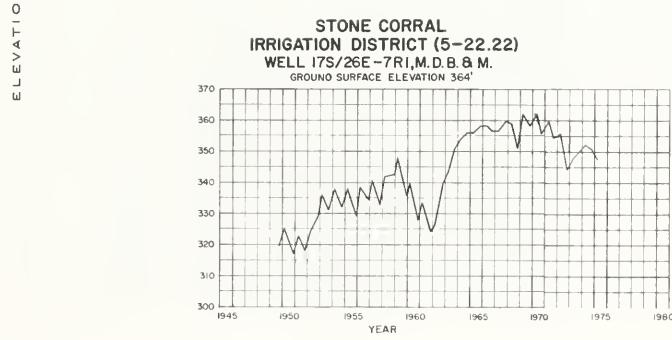
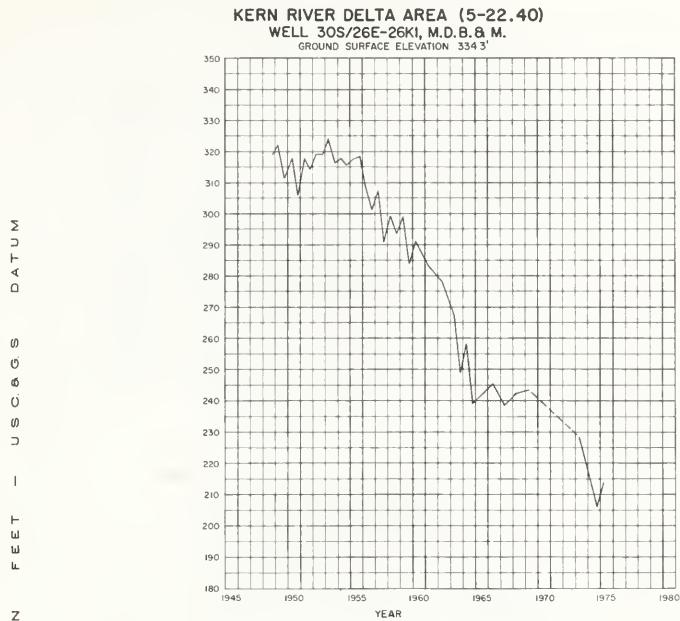
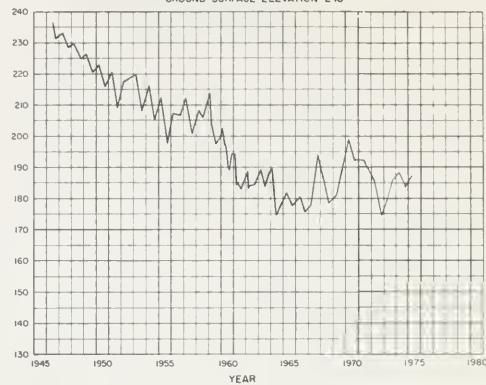


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

CONSOLIDATED IRRIGATION DISTRICT (5-22.18)
WELL 16S/20E-22NI, M.D.B.& M.

GROUND SURFACE ELEVATION 248'



SAUCELITO IRRIGATION DISTRICT (5-22.32)
WELL 22S/26E-15J1, M.D.B.& M.

GROUND SURFACE ELEVATION 371'

D A T U M
U S C G S
F E E T
I
E L E V A T I O N

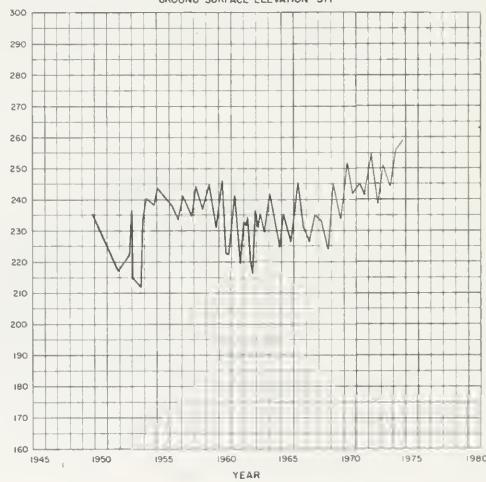


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

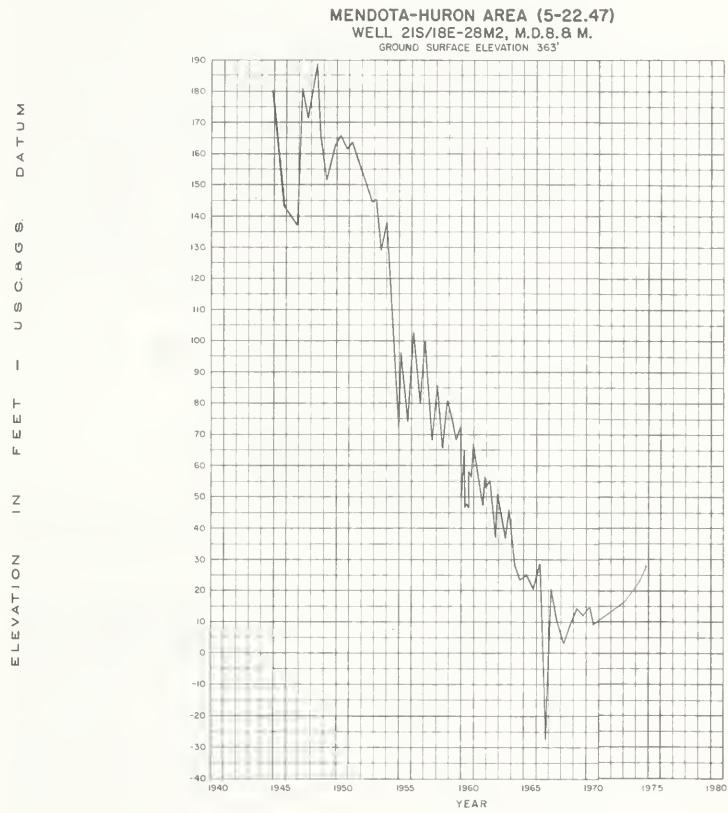


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

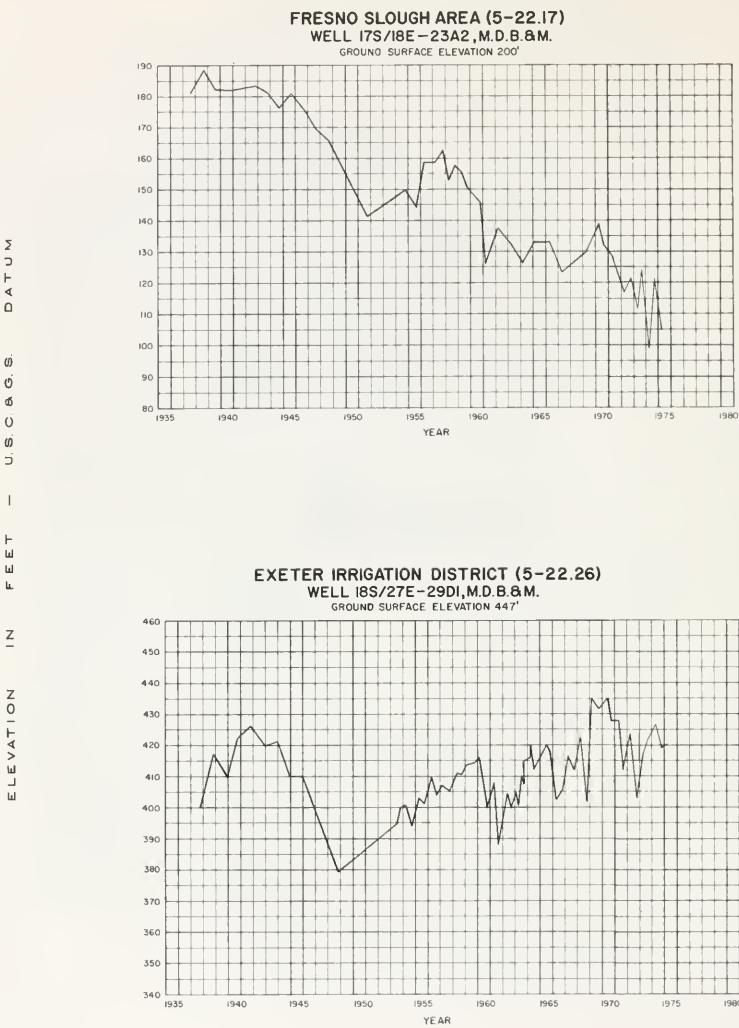
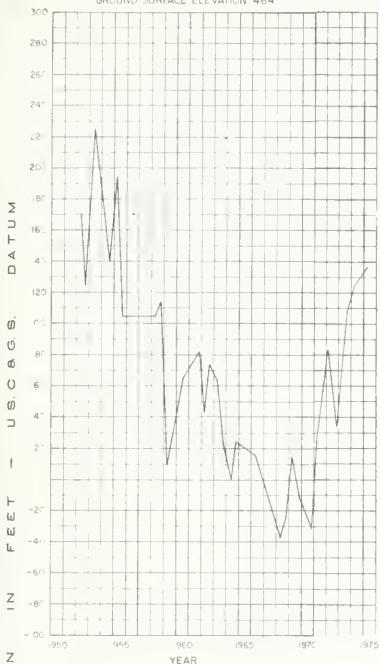
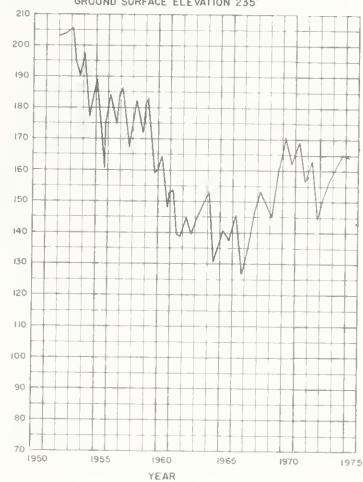


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

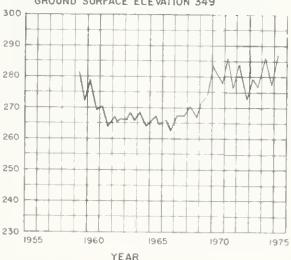
EDISON-MARICOPA AREA (5-22.41)
WELL IIN/21W-1NI, S.B.B. & M.
GROUND SURFACE ELEVATION 464'



**KAWeah DELTA
WATER CONSERVATION DISTRICT (5-22.24)**
WELL I9S/22E-I9A2, M.D.B.&M.
GROUND SURFACE ELEVATION 235'



**IVANHOE
IRRIGATION DISTRICT (5-22.23)**
WELL I7S/25E-35MI, M.D.B.&M.
GROUND SURFACE ELEVATION 349'



TULARE IRRIGATION DISTRICT (5-22.25)
WELL 20S/23E-10J1, M.D.B.&M.
GROUND SURFACE ELEVATION 248'

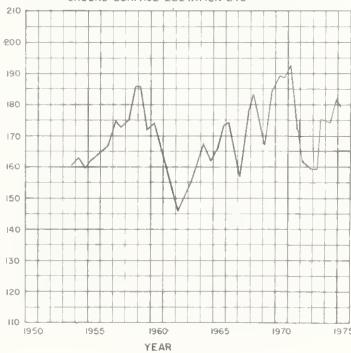
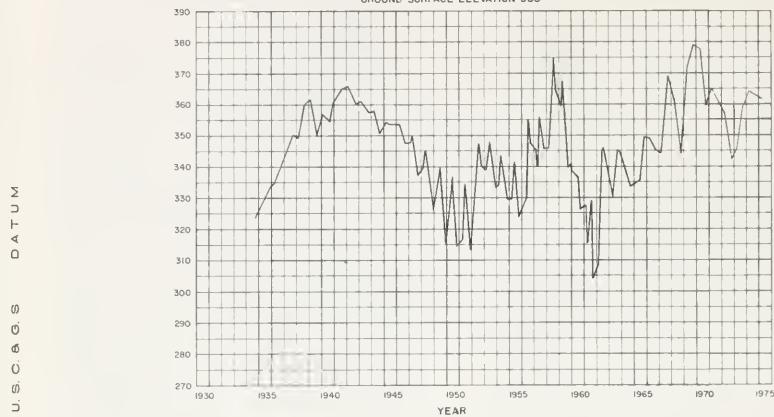
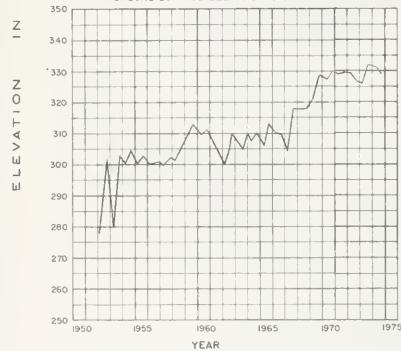


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

ALTA IRRIGATION DISTRICT (5-22.19)
WELL 15S/24E-22D1, M.D.B.&M.
GROUND SURFACE ELEVATION 388'



LINDSAY-STRATHMORE
IRRIGATION DISTRICT (5-22.27)
WELL 20S/27E-6B1, M.D.B.&M.
GROUND SURFACE ELEVATION 372'



ORANGE COVE
IRRIGATION DISTRICT (5-22.21)
WELL 16S/25E-4C2, M.D.B.&M.
GROUND SURFACE ELEVATION 415'

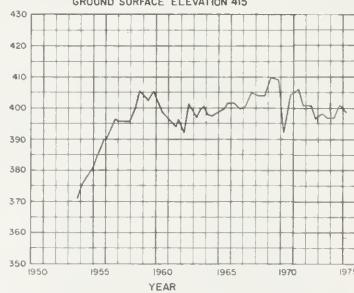
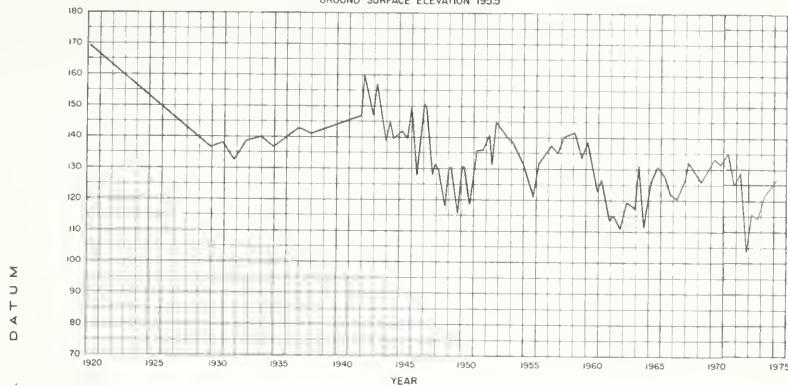


Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

CHOWCHILLA WATER DISTRICT (5-22.I2)
WELL 10S/1SE-23KI, M.D.B.& M.
GROUND SURFACE ELEVATION 195.5'



DELTA-MENDOTA AREA-DEEP ZONE (5-22.II)
WELL 10S/10E-31J1, M.D.B.& M.
GROUND SURFACE ELEVATION 178'

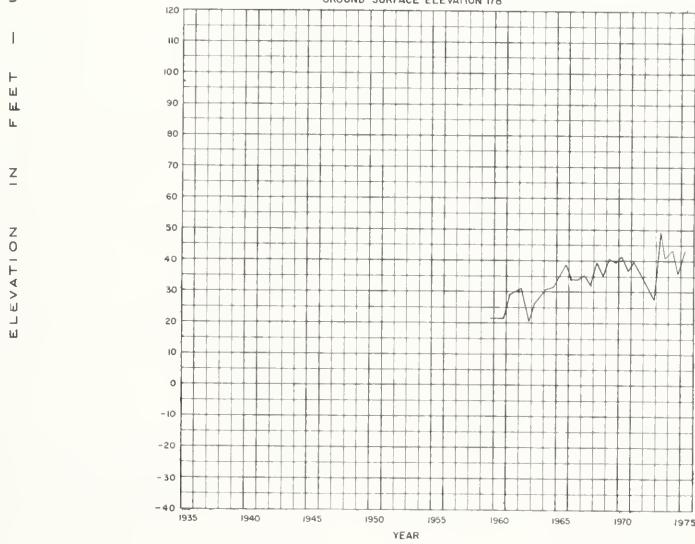


TABLE C-1

CHANGE IN AVERAGE GROUND WATER LEVEL
IN DISTRICTS OR AREAS IN THE SAN JOAQUIN VALLEY
Spring 1974 - Spring 1975

Ground Water Districts or Areas		Number of Wells Considered in Analysis ^a	Change in Feet
Name	Number		
San Joaquin Valley	5-22.00		
Oakdale Irrigation District	5-22.06		- 1.9
Modesto Irrigation District	5-22.07		+ 0.3
Turlock Irrigation District	5-22.08		+ 1.0
Merced Irrigation District	5-22.09		- 0.6
El Nido Irrigation District	5-22.10		- 0.6
Delta-Mendota Area	5-22.11	250	+ 1.2
Chowchilla Water District	5-22.12		+ 1.1
Madera Irrigation District	5-22.13		+ 0.6
West Chowchilla-Madera Area	5-22.14		- 4.4
Fresno Irrigation District	5-22.15		- 0.9
City of Fresno	5-22.16	60	- 0.4
Fresno Slough Area	5-22.17		- 0.3
Consolidated Irrigation District	5-22.18		+ 1.6
Alta Irrigation District	5-22.19		+ 3.6
Lower Kings River Area	5-22.20		
Shallow Zone			0.0
Deep Zone			+ 5.6
Orange Cove Irrigation District	5-22.21	62	- 1.7
Stone Corral Irrigation District	5-22.22	10	- 2.2
Ivanhoe Irrigation District	5-22.23		- 0.5
Kaweah-Delta Water Conservation District	5-22.24		+ 1.9
Tulare Irrigation District	5-22.25		+ 3.2
Exeter Irrigation District	5-22.26		- 1.4
Lindsay-Strathmore Irrigation District	5-22.27		- 3.7
Lindmore Irrigation District	5-22.28		+ 0.8
Porterville Irrigation District	5-22.29	16	- 1.4
Lower Tule River Irrigation District	5-22.30		
Shallow Zone			+ 1.7
Deep Zone			Insufficient data to compute change
Vandalia Irrigation District	5-22.31	5	- 0.2
Saucelito Irrigation District	5-22.32		
Shallow Zone			+ 0.2
Deep Zone			Insufficient data to compute change
Pixley Irrigation District	5-22.33		
Shallow Zone			- 5.1
Deep Zone			- 0.1

TABLE C-1 (Cont.)

CHANGE IN AVERAGE GROUND WATER LEVEL
IN DISTRICTS OR AREAS IN THE SAN JOAQUIN VALLEY
Spring 1974 - Spring 1975

Ground Water Districts or Areas		Number of Wells Considered in Analysis ^a /	Change in Feet
Name	Number		
San Joaquin Valley (Continued)			
Alpaugh-Allensworth Area	5-22.34		
Shallow Zone			- 5.8
Deep Zone			+ 0.5
Delano-Earlimart Irrigation District	5-22.35		
Shallow Zone			+ 0.9
Deep Zone			Insufficient data to compute change
Southern San Joaquin Municipal Utility District	5-22.36		
Shallow Zone			+ 8.7
Deep Zone			- 1.9
North Kern Water Storage District	5-22.37		
Shallow Zone			+ 4.1
Deep Zone			-12.6
Shafter-Wasco Irrigation District	5-22.38		
Deep Zone			- 5.7
City of Bakersfield	5-22.39	20	- 2.1
Kern River Delta Area	5-22.40		
Shallow Zone			+ 0.4
Deep Zone			- 3.4
Edison-Maricopa Area	5-22.41		
Deep Zone			- 0.4
Buena Vista Water Storage District	5-22.42		
North Area			-10.3
South Area			Insufficient data to compute change
Semitropic Water Storage District	5-22.43		
Shallow Zone			- 2.7
Deep Zone			-10.3
Avenal-McKittrick Area	5-22.44	27	- 1.2
Tulare Lake-Lost Hills Area	5-22.45	19	+ 2.8
Corcoran Irrigation District	5-22.46		
Shallow Zone			+ 1.6
Deep Zone			+ 5.8
Mendota-Huron Area	5-22.47		
Deep Zone			+17.8
Poso Resources Conservation District	5-22.48		+ 0.3
San Luis Canal Company	5-22.49		- 0.3

TABLE C-1 (Cont.)

CHANGE IN AVERAGE GROUND WATER LEVEL
IN DISTRICTS OR AREAS IN THE SAN JOAQUIN VALLEY
Spring 1974-- Spring 1975

Ground Water Districts or Areas		Number	Number of Wells Considered in Analysis ^{a/}	Change in Feet
Name				
San Joaquin Valley (Continued)				
Terra Bella Irrigation District	5-22.50	10		+ 0.1
Merced Bottoms	5-22.54			+ 1.1
Centerville Bottoms Area	5-22.64			- 1.9
Garfield Water District	5-22.65	11		+ 0.2
Kings County Water District	5-22.66			
Shallow Zone				+ 0.8
Deep Zone				Insufficient data to compute change
Pleasant Valley Area	5-22.69	18		+ 8.3

^{a/} Average changes were determined by planimetering ground water contour maps. Where numbers appear changes were computed by numerical averages.

TABLE C-2
CHANGE IN AVERAGE GROUND WATER LEVEL FROM
1921 TO 1951 AND 1951 TO 1975
IN 18 GROUND WATER AREAS IN THE SAN JOAQUIN VALLEY

Name of Ground Water Area*	Area in square miles	Irrigation and Other Water Districts Included in the Ground Water Area	Net change in water level 1921-51 ^{a/} in feet	Net change in water level 1951-75 ^{b/} in feet
Madera	342.6	Madera Irrigation District and Chowchilla Water District	- 24.1 ^{c/}	- 22.3
Fresno	404.0	Fresno Irrigation District and City of Fresno	- 22.4	- 16.8
Consolidated	243.0	Consolidated Irrigation District	- 19.0	+ 3.8
Centerville Bottoms	18.1	-----	+ 1.0	- 0.1
Alta	190.9	Alta Irrigation District	- 17.2 ^{d/}	+ 9.1
Ivanhoe	17.4	Ivanhoe Irrigation District	- 55.9	+18.2
Outside Ivanhoe	76.6	Stone Corral Irrigation District and a portion of Alta Irrigation District	- 28.5	+ 9.1
Mill Creek	128.2	Portions of Kings County Water District and Kaweah Delta Water Conservation District	- 31.1	-10.1
Tulare	121.1	Tulare Irrigation District	- 59.1	+ 9.4
Elk Bayou	67.6	Portion of Kaweah Delta Water Conservation District	- 47.8	+ 5.0
Lindsay-Exeter	136.4	Exeter Irrigation District, Lindsay-Strathmore Irrigation District, and Lindmore Irrigation District	- 77.7	+82.7
Tule River	156.6	Porterville Irrigation District, portions of Lower Tule River Irrigation District, and Saucelito Irrigation District	- 62.5	+42.6
Lower Deer Creek	162.2	Portions of Lower Tule River Irrigation District, Saucelito Irrigation District, and Delano-Earlimart Irrigation District	-106.7	-27.3 ^{e/} -10.2 ^{f/}
Middle Deer Creek	54.3	Terra Bella Irrigation District	- 61.8	- 3.4 ^{e/} -40.6 ^{f/}
Delano-Earlimart	140.0	Portions of Delano-Earlimart Irrigation District and Southern San Joaquin Municipal Utility District	-133.8	+28.0 ^{e/} +32.3 ^{g/}
McFarland-Shafter	306.0	North Kern Water Storage District, Shafter-Wasco Irrigation District, and a portion of Southern San Joaquin Municipal Utility District	- 99.0	-12.3 ^{e/} -54.1 ^{g/}
Rosedale	78.9	-----	- 36.3	-46.2 -25.7 ^{g/}
Arvin-Edison	205.2	Arvin-Edison Water Storage District	- 69.9 ^{d/}	-49.7 ^{g/}

^{a/} 1951 was the first year of substantial deliveries from the Friant-Kern Canal.

^{b/} Fall 1951 to spring 1975.

^{c/} Fall 1929 to fall 1951.

^{d/} Fall 1941 to fall 1951.

^{e/} Unconfined aquifer, spring 1961 to spring 1975; only one aquifer reported prior to 1961.

^{f/} Change shown for 1951 to 1971; insufficient data in pressure aquifer to compute changes for 1971-75.

^{g/} Pressure surface, spring 1961 to spring 1975; only one aquifer reported prior to 1961.

* These areas are shown on Plate 2.

TABLE C-3
GROUND WATER LEVELS AT WELLS

An explanation of the column headings and the code symbols follows:

State Well Number--refer to the explanation under Introduction, page 125.

Aquifer--Qualifications are based on the latest geologic knowledge of the aquifer system and construction of individual wells. The code symbols are as follows:

0	Unqualified due to lack of well construction and/or geology information.	4	Unconfined, outside Corcoran Clay area.
1	Unconfined, perforated above the Corcoran Clay.	5	Confined, aquitard other than Corcoran Clay.
2	Confined, perforated below the Corcoran Clay.	6	Composite, perforated above and below aquitard outside Corcoran Clay area.
3	Composite, perforated above and below the Corcoran Clay.		

Ground surface elevation represents the elevation in feet above mean sea level (U.S.G.S. and U.S.C. & G.S. datum) of the ground surface at the well. Elevations are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date is the date the depth measurement was made. Where 00 appears in the date, day of measurement is unknown.

Ground surface to water surface in feet is the measured depth in feet from the ground surface to the water surface in the well.

Other code symbols used in this column are as follows:

NO MEASUREMENT (NM)	
0	Measurement discontinued
1	Pumping
2	Pump house locked
3	Tape hung up
4	Can't get tape in casing
5	Unable to locate well
6	Well has been destroyed
7	Special
8	Casing leaking or wet
9	Temporarily inaccessible

The words FLOW and DRY are shown in this column to indicate a flowing or dry well.

Water surface elevation is the elevation in feet above mean sea level (U.S.G.S. and U.S.C. & G.S. datum) of the water surface in the well. It was derived by machine computation by subtraction of the depth measurement from the reference point elevation.

Agency supplying data represents the code numbers for the agencies supplying water level data.

In this list of water levels, the agency furnishing the measurement is noted. The agencies and code numbers assigned to them are as follows:

<u>Agency Code</u>	<u>Agency</u>	<u>Agency Code</u>	<u>Agency</u>
5001	U. S. Bureau of Reclamation	5605	Exeter Irrigation District
5050	Department of Water Resources	5606	Lindsay-Strathmore Irrigation District
5129	Kings County Water District	5607	Lindmore Irrigation District
5133	Kern County Water Agency	5608	Porterville Irrigation District
5200	City of Fresno	5609	Lower Tule Irrigation District
5520	Oakdale Irrigation District	5611	Saucelito Irrigation District
5521	Modesto Irrigation District	5612	Pixley Irrigation District
5524	Turlock Irrigation District	5613	Delano-Earlimart Irrigation District
5525	Merced Irrigation District	5614	Southern San Joaquin Municipal Utility District
5527	El Nido Irrigation District	5616	Shafter-Wasco Irrigation District
5528	Chowchilla Water District	5619	Terra Bella Irrigation District
5529	Paso Resources Conservation District	5620	James Irrigation District
5530	Madera Irrigation District	5622	Garfield Water District
5531	San Luis Canal Company	5631	Fresno Irrigation District
5600	Orange Cove Irrigation District	5636	Consolidated Irrigation District
5601	Stone Corral Irrigation District	5637	Alta Irrigation District
5602	Ivanhoe Irrigation District	5640	Buena Vista Water Storage District
5603	Kaweah Delta Water Conservation District	5644	Arvin-Edison Water Storage District
5604	Tulare Irrigation District		

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND WATER ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE	STATE WELL NUMBER	AQUIFER	GROUND WATER ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE
OAKDALE I.D.							TURLOCK I.D.						
01S/09E-16J01 M		119.0	4-18-75	65.6	53.4	5520	06S/10E-21A01 M		85.6	3-05-75	3.7	81.9	5524
01S/09E-36A01 M		145.0	4-18-75	55.9	69.1	5520	06S/10E-28D01 M		83.6	3-05-75	10.1	73.5	5524
01S/10E-19J01 M		146.5	4-18-75	57.8	88.7	5520	06S/11E-06N01 M		106.2	3-15-75	9.1	97.1	5524
01S/10E-28J01 M		193.0	4-18-75	84.6	109.4	5520	06S/11E-08B01 M		116.2	3-05-75	11.5	104.7	5524
02S/09E-26F01 M		132.0	4-18-75	54.6	77.4	5520	MERCED I.D.						
02S/10E-04H01 M		185.5	4-18-75	76.2	107.3	5520	06S/12E-22N01 M	1	150.0	11-13-74	19.0	131.0	5520
02S/10E-33J01 M		165.0	4-18-75	59.2	105.8	5520	06S/14E-32N01 M	1	178.1	3-04-75	15.1	163.0	5525
02S/11E-29B01 M		218.0	4-18-75	90.5	127.5	5520	07S/10E-01N01 M	1	90.7	3-04-75	7.8	82.9	5525
02S/11E-31N01 M		192.0	4-18-75	77.2	114.8	5520	07S/11E-01H01 M		118.0	11-12-74	13.0	105.0	5050
02S/12E-31K01 M		190.0	4-18-75	41.4	148.6	5520	2-28-75						
03S/10E-15A01 M		152.0	4-18-75	44.9	107.1	5520	07S/11E-13H01 M	1	108.6	3-03-75	8.7	97.9	5525
03S/11E-18B01 M		162.0	4-18-75	NN-1		5520	07S/12E-12D01 M	1	144.0	11-12-74	1.0	143.0	5050
MODESTO I.D.							3-03-75						
02S/08E-26P01 M		94.0	3-04-75	37.6	56.4	5521	07S/12E-12R01 M	1	147.3	3-03-75	16.9	130.4	5525
02S/09E-30F01 M		93.0	11-13-74	24.0	69.0	5050	07S/12E-26E001 M	1	155.8	11-12-74	11.1	144.7	5050
3-26-75							3-03-75						
02S/09E-31G01 M		97.0	3-04-75	34.2	62.8	5521	07S/14E-11N01 M	1	191.8	11-12-74	13.4	178.4	5050
03S/07E-12C01 M		47.0	11-13-74	9.8	37.2	5050	07S/14E-16R01 M	1	187.3	3-05-75	16.5	170.8	5525
03S/07E-35A02 M		40.0	11-13-74	4.1	35.9	5050	08S/12E-01D01 M	1	120.1	3-03-75	7.9	112.2	5525
3-26-75							08S/13E-09R01 M	1	135.0	3-03-75	5.4	129.6	5525
03S/08E-03N01 M		65.0	3-04-75	16.9	48.1	5521	08S/13E-09R01 M	1	197.5	3-04-75	11.9	185.6	5525
03S/09E-24C02 M		73.0	3-04-75	20.0	53.0	5521	08S/14E-10H01 M	1	172.6	11-12-74	8.1	164.5	5050
03S/09E-08D01 M		92.0	3-04-75	28.2	63.8	5521	3-03-75						
03S/09E-11H01 M		99.0	3-04-75	23.2	75.8	5521	EL NIDO I.D.						
03S/09E-26F01 M		100.0	3-04-75	NN-0		5050	09S/13E-14H01 M		133.0	10-07-74	NN-7		5527
03S/10E-06G01 M		133.1	3-04-75	35.2	97.9	5521	09S/14E-20B01 M		152.0	10-07-74	82.4	69.6	5527
03S/10E-29K01 M		118.0	3-04-75	47.9	70.1	5521	2-05-75						
03S/10E-32C001 M		120.0	3-04-75	58.7	61.3	5521	5-22.11						
03S/10E-34D01 M		125.0	3-04-75	NN-6		5050	04S/06E-04N01 M	2	196.0	10-18-74	164.3	31.7	5607
04S/08E-03F01 M		60.0	3-04-75	16.7	43.3	5521	04S/06E-09R01 M	1	166.3	10-19-74	118.4	47.9	5607
5-22.08							04S/06E-09R01 M	1	166.3	4-07-75	115.3	51.0	5001
TURLOCK I.D.							04S/07E-27M01 M	1	68.0	10-23-74	22.6	45.4	5607
04S/08E-22B01 M	1	56.0	11-13-74	10.0	45.0	5050	4-14-75						
3-26-75							05S/07E-14D01 M	1	130.4	10-22-74	79.1	51.3	5607
04S/08E-27D01 M		55.0	3-05-75	10.8	44.2	5524	05S/07E-23L01 M		138.0	10-22-74	82.1	55.9	5607
04S/09E-21N01 M		75.0	3-05-75	9.7	65.3	5524	4-08-75						
04S/10E-21B01 M		110.9	3-05-75	15.1	93.9	5524	05S/08E-32K01 M	1	90.9	10-22-74	7.4	83.5	5607
04S/11E-29N01 M	1	131.0	3-05-75	DRY		5524	04S/08E-29J01 M	2	190.0	3-26-75	93.0	97.0	5050
04S/11E-31R01 M		128.0	3-05-75	12.1	115.9	5524	06S/07E-12P01 M		248.3	10-17-74	13.2	235.1	5050
05S/08E-01N01 M		53.0	3-05-75	5.7	47.3	5524	3-26-75						
05S/08E-10A01 M		44.0	3-05-75	12.3	31.7	5524	06S/08E-21B02 M	2	133.5	10-17-74	34.0	99.5	5050
05S/09E-04A01 M		70.0	11-13-74	10.0	60.0	5050	3-26-75						
05S/09E-14R01 M		75.0	3-05-75	7.2	67.8	5524	06S/08E-27J01 M	1	114.5	10-17-74	41.0	73.5	5050
05S/09E-24N01 M		75.0	3-05-75	8.3	66.7	5524	07S/09E-02R01 M		190.0	3-26-75	93.0	97.0	5050
05S/09E-28A01 M		63.0	3-05-75	4.7	58.3	5524	3-27-75						
05S/09E-34J01 M		64.0	11-13-74	14.3	49.7	5050	07S/09E-04R01 M	1	65.5	10-18-74	17.0	46.5	5050
05S/10E-19R01 M		82.0	3-05-75	6.7	75.3	5524	07S/09E-26N01 M	1	68.4	10-16-74	9.2	59.2	5050
05S/10E-21R01 M		92.0	3-05-75	10.7	81.3	5524	08S/09E-01N01 M	1	123.2	10-15-74	15.5	107.7	5050
05S/11E-06J02 M	1	124.0	11-13-74	7.0	117.0	5050	08S/09E-15J01 M	2	172.6	3-25-75	25.5	147.1	5050
3-26-75							08S/09E-26H01 M	2	75.0	10-15-74	38.9	36.1	5050
05S/11E-21N01 M		125.0	3-05-75	10.1	114.9	5524	3-27-75						
05S/11E-30A01 M		117.0	3-05-75	13.4	103.6	5524	08S/09E-26H03 M	1	75.0	10-15-74	5.5	69.5	5050
05S/11E-33N01 M		115.5	3-05-75	8.8	106.7	5524	3-27-75						
06S/09E-15R01 M		60.0	3-05-75	1.8	56.2	5524	08S/10E-21L04 M		75.0	10-15-74	6.4	68.6	5050

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND WATER ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE	STATE WELL NUMBER	AQUIFER	GROUND WATER ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE							
DELTA-MENDOTA AREA																				
5-22-11																				
095/08E-24A01 M	1	157.0	10-17-74 3-25-75	9.0 19.0	148.0 138.0	5050	115/16E-06A01 M	196.0	10-07-74 2-06-75	77.4 66.8	118.6 129.2	5530								
095/09E-14N01 M		96.0	10-17-74 3-28-75	60.0 35.0	36.0 61.0	5050	115/16E-10N01 M	204.0	10-07-74 2-06-75	72.0 68.3	135.7 135.7	5530								
095/09E-18N01 M	2	153.6	10-17-74 3-27-75	32.0 29.0	121.6 124.6	5050	115/17E-27C01 M	1	250.0	10-04-74 2-05-75	75.4 74.7	174.6 175.3	5530							
095/09E-23L01 M	2	100.0	10-17-74 3-28-74	65.0 47.0	35.0 53.0	5050	115/18E-20N01 M	1	272.5	10-01-74 1-30-75	88.2 71.4	184.3 201.1	5530							
095/10E-19B01 M	3	84.0	10-17-74 3-28-75	NM-5 NM-0		5050	115/18E-27M01 M	1	284.0	10-01-74 1-30-75	86.3 82.5	197.7 201.5	5530							
095/10E-23J01 M	2	87.0	10-16-74 3-28-75	45.0 34.0	42.0 53.0	5050	125/16E-23A01 M	205.0	10-03-74 2-03-75	96.7 84.8	100.3 120.2	5530								
095/11E-09A01 M	1	85.0	3-00-75	6.0	79.0	5531	125/17E-08G01 M	230.0	10-03-74 2-04-75	90.2 83.6	139.8 146.4	5530								
095/11E-29R01 M	1	90.0	10-16-74 3-26-75	NM-1 4.0	86.0	5050	125/17E-21H01 M	1	228.0	10-03-74 2-03-75	72.3 65.0	155.7 159.0	5530							
105/10E-02R01 M	1	99.5	10-16-74 3-26-75	18.0 12.0	81.5 87.5	5050	125/17E-26C01 M	235.0	10-03-74 2-03-75	60.6 57.2	174.4 177.8	5530								
105/10E-31G01 M	2	191.1	10-16-74 3-26-75	152.0 162.0	39.1 29.1	5050	125/17E-34R01 M	234.0	10-03-74 2-03-75	60.9 50.0	173.1 180.4	5530								
105/10E-32N01 M	1	189.5	10-16-74 3-26-75	80.0 75.0	109.5 114.5	5050	125/18E-13R01 M	268.0	10-01-74 1-30-75	82.2 80.0	205.8 208.0	5530								
105/11E-27E02 M	2	101.3	10-16-74 3-27-75	65.0 55.0	36.3 46.3	5050	125/18E-21H01 M	1	265.0	10-02-74 1-31-75	74.6 71.1	190.4 193.9	5530							
115/10E-11301 M	1	157.3	10-15-74 3-29-75	12.0 10.0	145.3 147.3	5050	125/18E-21H01 M	267.0	10-02-74 1-31-75	70.3 66.9	196.7 200.1	5530								
115/10E-22C01 M		246.8	10-15-74 3-26-75	98.0 100.0	148.8 146.8	5050	125/19E-28A01 M	4	307.5	10-09-74 1-27-75	91.2 89.0	216.3 217.0	5001							
115/11E-02J02 M	1	106.0	10-15-74 3-25-75	2.0 2.0	104.0 104.0	5050	WEST CHOWCHILLA-MADERA AREA													
115/11E-22C01 M	2	114.0	10-15-74 3-25-75	9.5 12.0	104.5 102.0	5050	105/13E-22B01 M	119.0	9-24-74 1-21-75	26.2 24.1	92.8 94.9	5001								
115/11E-23Q03 M	3	114.0	10-15-74 3-25-75	13.0 12.0	101.0 102.0	5050	105/14E-08B03 M	147.0	10-08-74 2-06-75	99.5 90.5	47.5 56.5	5528								
125/12E-06D01 M		144.0	10-16-74 3-24-75	6.4 5.7	137.6 138.3	5001	105/14E-31H01 M	130.0	9-24-74 1-21-75	45.8 40.0	84.2 90.0	5001								
125/12E-25J01 M		161.1	10-17-74 3-25-75	5.7 3.5	175.4 177.6	5001	105/14E-35F01 M	151.0	10-07-74 1-21-75	93.3 79.5	57.7 71.5	5001								
125/13E-14N01 M		150.0	10-16-74 3-26-75	23.5 22.1	126.5 127.9	5001	115/14E-13R01 M	150.0	9-25-74 1-21-75	NM-1 NM-1		5001								
CHOWCHILLA W.O.																				
5-22-12																				
095/14E-25R01 M	1	185.0	10-07-74 1-31-75	67.5 64.5	117.5 120.5	5528	115/15E-3E01 M	156.0	9-25-74 1-21-75	82.6 60.5	73.4 95.5	5001								
095/15E-25J02 M	1	230.0	10-01-74 1-31-75	40.0 41.5	190.0 188.5	5528	115/15E-33P01 M	158.0	9-25-74 1-21-75	80.4 57.6	77.6 100.2	5001								
095/15E-27A01 M		216.5	11-12-74 3-12-75	119.0 NM-0	97.5 97.5	5050	125/15E-14L01 M	1	167.0	9-28-74 1-23-75	NH-7 67.3	99.7	5001							
095/16E-22B01 M		267.0	10-03-74 1-30-75	45.5 47.0	221.5 220.0	5528	135/16E-02C01 M	194.0	10-02-74 2-03-75	89.5 71.3	104.5 122.7	5530								
FRESNO I.D.																				
5-22-12																				
095/17E-19L01 M	1	292.0	10-03-74 1-30-75	113.5 112.5	178.5 179.5	5528	125/20E-14A01 M	4	365.0	9-27-74 2-04-75	NN-9 92.0	273.0	5001							
095/17E-25B01 M	1	338.0	9-27-74 1-21-75	76.2 63.9	261.8 274.1	5001	125/21E-34D01 M	4	387.7	10-01-74 2-01-75	44.4 42.3	343.3 345.4	5631							
095/18E-33Q01 M	4	362.0	9-27-74 1-21-75	58.5 54.8	303.5 307.2	5001	125/22E-21E01 M	4	473.0	9-24-74 1-23-75	15.3 15.0	457.7 458.0	5001							
105/14E-01A01 M		179.0	10-07-74 1-31-75	75.7 104.0	103.3 104.0	5528	135/17E-22B01 M	4	220.8	10-01-74 2-01-75	34.0 37.3	186.8 183.5	5631							
105/14E-01R02 M		177.0	10-07-74 1-31-75	68.5 68.0	106.5 109.0	5528	135/17E-33D01 M	211.0	10-10-74 1-23-75	56.0 53.1	155.0 157.9	5001								
105/14E-24R01 M		167.0	10-07-74 2-04-75	86.5 85.0	80.5 82.0	5528	135/18E-10P01 M	258.0	10-10-74 1-24-75	46.5 49.0	211.5 209.0	5001								
105/15E-02Q01 M		212.5	10-02-74 1-31-75	114.0 110.5	98.5 102.0	5528	135/18E-34D01 M	245.0	10-10-74 1-24-75	56.9 56.0	188.1 189.0	5001								
105/15E-23K01 M		195.5	10-02-74 2-05-75	71.5 69.0	124.0 126.5	5528	135/19E-09Q01 M	4	288.2	10-01-74 2-01-75	77.0 76.5	211.2 213.5	5631							
105/15E-27D03 M		184.0	10-02-74 2-05-75	79.5 72.5	104.5 111.5	5528	135/19E-16K01 M	290.0	10-10-74 1-24-75	81.5 76.5	208.5 213.5	5001								
105/16E-09E01 M		232.0	10-10-74 2-04-75	95.0 92.9	137.0 139.1	5528	135/20E-12H01 M	343.4	10-01-74 2-01-75	NN-1 76.5	266.9	5631								
105/16E-29R01 M	1	208.0	10-02-74 2-05-75	84.0 77.5	124.0 130.5	5528	135/23E-31P01 M	4	406.5	10-01-74 2-01-75	30.9 34.5	375.6 372.0	5631							
MADERA I.D.																				
5-22-13																				
105/19E-16001 M	4	390.0	9-27-74 1-21-75	16.7 23.1	373.3 366.9	5001	145/18E-08J01 M	4	227.4	10-02-74 2-01-75	72.8 65.9	154.6 161.5	5631							
145/20E-06J01 M																				
145/20E-06J01 M																				
145/19E-16001 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
145/19E-20B02 M																				
1																				

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE	STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE							
FRESNO I.D.																				
				5-22.15				ALTA I.D.		5-22.19										
15S/20E-13E02 M		282.5	10-02-74 2-01-75	32.8 36.1	249.7 246.4	5631	16S/24E-21J01 M	1	336.0	10-01-74 2-03-75	NM-1 27.1	308.4	5637							
CITY OF FRESNO				5-22.15			16S/25E-29A01 M	4	364.0	10-02-74 2-03-75	36.1 29.3	327.9 334.7	5637							
13S/20E-21J01 M		310.0	4-00-75	96.3	211.7	5200	17S/22E-25A01 M	4	275.0	10-02-74 2-04-75	47.9 36.1	227.1 236.9	5637							
13S/20E-23B01 M		325.0	4-00-75	93.2	231.8	5200	17S/22E-25J01 M	4	275.0	10-02-74 2-04-75	44.3 42.9	230.7 232.1	5637							
13S/20E-28E01 M		299.3	10-03-74 4-01-75	87.0 91.5	212.3 207.8	5200	17S/24E-15A03 M		302.0	10-03-74 1-22-75	30.1 22.2	271.9 279.8	5001							
13S/20E-35H02 M		305.3	4-00-75	80.5	224.6	5200	17S/25E-10C01 M	4	335.0	10-03-74 2-03-75	31.3 31.4	303.7 303.6	5637							
14S/20E-10H01 M		291.4	10-03-74 4-00-75	76.1 74.5	215.3 216.9	5200	17S/25E-18R01 M	4	321.0	10-03-74 2-03-75	51.8 49.6	269.2 271.4	5637							
FRESNO SLOUGH AREA																				
				5-22.17				LOWER KINGS RIVER AREA		5-22.20										
14S/15E-25H02 M		160.0	10-11-74 1-23-75	30.5 20.4	129.5 13%.6	5001	17S/19E-14J01 M		217.0	11-07-74 2-21-75	81.0 84.0	136.0 133.0	5050							
14S/16E-03C01 M		177.0	10-10-74 1-22-75	76.5	100.5	5001	17S/20E-20D01 M	1	223.0	11-07-74 2-21-75	68.0 72.0	155.0 151.0	5050							
14S/16E-08D01 M		165.0	10-11-74 1-22-75	NM-1 42.2	122.8	5001	17S/21E-11K01 M		257.0	11-06-74 2-19-75	37.0 23.4	220.0 234.0	5050							
14S/16E-22N01 M	1	164.0	10-11-74 1-13-75	33.0 28.3	131.0 135.7	5001	18S/19E-35J02 M	3	211.0	11-06-74 2-18-75	116.0 110.0	95.0 101.0	5050							
14S/17E-25A01 M	1	210.0	10-15-74 1-13-75	113.3	96.7	5620	18S/20E-16A01 M	1	230.0	11-06-74 2-19-75	7.5 8.0	222.5 222.0	5050							
15S/16E-12C03 M		169.5	11-07-74 1-16-75	40.0 39.8	129.5 129.7	5050	18S/21E-10R01 M		254.0	11-06-74 1-30-75	64.0 62.7	190.0 191.3	5129							
15S/17E-22R01 M	1	185.0	10-02-74	NM-6	5620	18S/18E-07A02 M		208.0	11-06-74 2-18-75	5.4 2.0	202.6 206.0	5050								
15S/18E-10R01 M		204.0	10-17-74 1-15-75	126.3	77.7	5620	19S/19E-25A01 M	1	208.0	11-06-74 2-18-75	7.5 8.0	222.5 222.0	5050							
16S/18E-03J01 M		206.0	2-24-75	NM-1	5050	ORANGE COVE I.D.														
16S/18E-33P01 M		195.0	2-21-75	152.0	43.0	5050	14S/24E-29C02 M	4	430.5	10-03-74 2-04-75	NM-1 41.5	389.0	5600							
16S/19E-34P01 M		220.0	11-07-74 2-21-75	125.0 115.0	95.0 105.0	5050	14S/25E-30D01 M	1	510.0	9-30-74 1-20-75	24.0 24.1	486.0 485.9	5001							
17S/17E-12H01 M	1	199.0	12-19-74	150.0	49.0	5050	14S/26E-30001 M	1	510.0	9-30-74 1-20-75	24.0 24.1	486.0 485.9	5001							
17S/18E-23A02 M	1	200.0	11-07-74 2-20-75	79.0 95.0	121.0 105.6	5050	15S/24E-14H01 M	4	415.0	10-01-74 2-04-75	24.8 27.4	390.2 387.6	5000							
CONSOLIDATED I.D.																				
				5-22.18				16S/25E-04C02 M	4	415.0	10-04-74 2-03-75	14.0 16.2	401.0 398.8	5600						
14S/22E-22N01 M	4	355.7	10-01-74 2-03-75	27.7 27.0	328.0 327.9	5601	STONE CORRAL I.D.													
15S/19E-24N01 M	4	245.7	10-01-74 2-03-75	83.9 81.2	161.8 164.5	5601	17S/25E-01D01 M	1	355.0	10-03-74 2-03-75	NM-1 NM-9	389.0	5637							
15S/20E-20A01 M		264.0	11-00-75	NM-0	5636	5-22.22														
15S/21E-15K01 M	4	301.0	10-01-74 2-03-75	26.8 24.6	274.2 276.4	5601	17S/26E-07R01 M		364.0	10-07-74 1-23-75	13.1 16.3	350.9 347.7	5601							
15S/22E-16A01 M	4	337.0	10-01-74 2-04-75	24.6 25.2	312.4 311.8	5601	IVANHOE I.D.													
15S/22E-29D01 M	4	321.0	10-02-74 2-04-75	24.3 25.9	296.7 295.1	5601	17S/25E-27R01 M	4	350.0	10-01-74 2-04-75	17.2 71.7	272.8 278.3	5602							
16S/19E-14A01 M	4	235.0	10-01-74 2-04-75	109.5 99.4	125.5 135.6	5601	17S/25E-35M01 M	4	349.0	10-01-74 2-04-75	70.9 61.5	278.1 287.5	5602							
16S/20E-22N01 M	4	248.0	10-02-74 2-04-75	64.2 60.5	183.8 187.5	5601	17S/25E-36G01 M	4	365.0	10-01-74 2-04-75	63.4 61.5	301.6 303.5	5602							
16S/21E-22N01 M	4	271.0	10-02-74 2-04-75	43.1 40.3	227.9 230.7	5636	17S/26E-32N01 M	4	385.0	10-01-74 2-04-75	62.5 57.1	322.5 327.9	5602							
16S/22E-23R01 M	4	297.0	10-02-74 2-04-75	21.5 21.9	275.5 275.1	5636	17S/26E-34D01 M	4	416.0	10-01-74 2-04-75	62.2 60.5	353.8 355.5	5602							
KAWeah-DELTA W.C.D.																				
17S/22E-03C01 M	4	260.0	10-02-74 2-04-75	19.2 20.6	266.8 265.4	5636	17S/25E-15P01 M	1	340.0	10-03-74 1-22-75	82.4 75.2	257.6 264.8	5001							
ALTA I.D.																				
14S/23E-36R01 M	4	391.0	10-01-74 1-31-75	46.8 47.3	344.2 343.7	5637	17S/26E-17P02 M	1	385.0	10-03-74 1-23-75	16.7 22.0	368.3 363.0	5001							
14S/24E-31P01 M	4	395.0	10-01-74 1-31-75	39.0 46.8	356.0 349.2	5637	17S/27E-34P01 M	1	470.0	10-04-74 1-23-75	12.7 13.0	457.3 457.0	5001							
15S/23E-23A02 M	4	358.0	10-01-74 1-31-75	43.5 42.4	314.5 315.6	5637	18S/22D-30E02 M	3	248.0	10-01-74 2-13-75	95.0 89.0	153.0 159.0	5603							
15S/24E-22D01 M	4	388.0	10-01-74 1-31-75	25.4 26.3	362.6 361.7	5637	18S/23E-12H01 M		282.5	10-02-74 2-20-75	NM-9 47.5	235.0	5603							
16S/23E-23E01 M	4	314.0	10-04-74 2-05-75	21.0 21.6	293.0 292.4	5637	18S/23E-34A01 M		271.0	9-23-74 2-11-75	112.7 90.7	158.3 174.3	5129							
									18S/24E-26A01 M	4	312.0	10-12-74 1-21-75	11.0 NM-1	301.0	5603					

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE	STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE							
KAWAHAH-DELTA W.C.N.																				
185/25E-12Q01 M	4	363.0	10-04-74 2-03-75	61.5 45.5	301.5 317.5	5603	218/26E-12A01 M		372.0	10-01-74 2-07-75	30.1 29.1	341.7 342.9	5608							
185/25E-33F01 M	4	338.0	10-04-74 2-26-75	33.0 24.0	305.0 314.0	5603	215/27E-21C01 M		409.0	10-01-74 2-07-75	17.5 NM-6	391.5	5608							
185/26E-27E01 M	4	390.0	10-04-74 2-25-75	23.0	367.0	5603	215/27E-28E01 M		420.0	10-01-74 2-07-75	24.1 19.9	395.9 400.1	5608							
185/26E-30N01 M		367.0	10-04-74 2-25-75	15.5 19.5	351.5 347.5	5603	225/26E-01J01 M		395.0	10-02-74 2-07-75	72.8 69.1	322.2 325.9	5608							
195/22E-01N02 M	1	245.0	10-10-74 2-20-75	61.5 64.5	183.5 180.5	5603	225/27E-06001 M		397.0	2-07-75	50.5	346.5	5608							
195/22E-36E01 M	1	234.3	9-19-74 2-06-75	75.3 75.0	189.0 159.3	5129	226/27E-10A01 M		455.0	10-02-74 2-06-75	NM-0	416.1	5608							
195/25E-07K01 M		318.0	10-07-74 2-21-75	67.0 68.0	251.0 250.0	5603	225/27E-04A01 M		432.0	10-01-74 2-06-75	15.9 18.2	413.0	5608							
195/26E-34R02 M	1	341.0	9-23-74 1-20-75	90.1 63.5	250.9 277.5	5001	LOWER TULE RIVER I.O.													
205/22E-10C01 M	1	227.0	10-10-74	88.0	139.0	5603	215/23E-22J01 M		221.5	10-09-74 2-24-75	59.0 57.0	162.5 164.5	5603							
TULARE I.D.																				
195/23E-14R01 M	1	270.0	10-03-74 2-11-75	NM-1	200.0	5604	215/24E-31001 M		230.0	10-17-74 2-18-75	62.5 65.1	167.5 164.9	5609							
195/23E-13H01 M	1	250.5	10-03-74 2-11-75	75.0 74.0	175.5 176.5	5604	215/24E-35M01 M		251.0	10-15-74 2-18-75	82.2 75.0	168.8 176.0	5609							
195/24E-16P01 M		290.0	10-03-74 2-12-75	87.0 76.0	203.0 214.0	5604	215/25E-08H01 M		286.0	10-18-74 2-14-75	85.9 62.5	200.1 223.5	5609							
195/24E-27001 M	1	290.0	10-01-74 2-12-75	82.5 NM-1	207.5	5604	215/26E-06G02 M		322.0	10-09-74 2-12-75	66.4 56.0	255.6 266.0	5609							
195/25E-17A02 M	4	328.0	10-01-74 2-06-75	47.5 49.5	280.5 278.5	5604	215/26E-10E01 M		350.0	10-08-74 2-12-75	36.7 36.1	313.3 313.9	5609							
205/23E-08B02 M	1	241.0	10-04-74 2-11-75	82.5 76.5	158.5 164.5	5603	225/24E-09A01 M		245.0	10-11-74 2-19-75	124.1 123.7	119.9 120.3	5609							
205/24E-16H01 M		273.0	10-01-74 2-10-75	95.0 81.0	178.0 192.0	5603	225/24E-15A01 M		253.0	10-11-74 2-19-75	134.0 129.6	119.0 123.4	5609							
205/24E-30J02 M	1	250.0	10-02-74 2-10-75	101.0 79.5	149.0 170.5	5603	225/25E-10E01 M		296.0	10-10-74 2-10-75	91.7 90.6	204.3 205.4	5609							
215/23E-05R01 M	1	222.0	10-02-74 2-10-75	68.0 NM-1	154.0	5604	225/25E-15A01 M		303.0	10-10-74 2-10-75	129.1 127.9	173.9 175.1	5609							
EXETER I.D.																				
5-22-26																				
185/26E-25K01 M	4	436.0	10-01-74	NM-6		5605	VANDALIA I.D.													
185/26E-34P02 M	4	391.0	10-01-74 2-03-75	45.3 42.5	345.7 348.5	5605	225/28E-07G01 M		524.0	10-01-74 1-21-75	NM-1 119.0	405.0	5001							
185/27E-29D01 M	4	447.0	10-01-74 2-03-75	27.4 26.8	419.6 420.2	5605	225/28E-17N01 M		577.0	10-11-74 1-21-75	165.7 NM-6	411.3	5001							
195/26E-14E01 M	4	375.0	10-01-74 2-03-75	66.3 62.8	308.7 312.2	5605	225/28E-18A01 M		535.0	10-01-74 1-21-75	132.6 105.6	402.4 429.4	5001							
195/26E-23E01 M	4	359.5	10-01-74 2-03-75	65.2 59.8	294.3 299.7	5605	SAUCELITO I.O.													
LINDSAY-STRATHMORE I.D.																				
5-22-27																				
195/27E-29K01 M	4	385.0	10-03-74 2-05-75	46.3 45.9	338.7 339.1	5606	225/26E-02R01 M		396.0	10-04-74 1-29-75	167.5 149.0	228.5 247.0	5611							
205/27E-06B01 M	4	372.0	10-03-74 2-05-75	42.7 42.0	329.3 328.5	5606	225/26E-10F01 M		375.0	10-03-74 1-29-75	173.5 NM-1	201.5	5611							
205/27E-16A01 M	4	426.0	10-03-74 2-05-75	23.8 26.8	402.2 399.2	5006	PIXLEY I.D.													
205/27E-21F01 M	4	414.0	10-03-74 2-05-75	26.2 28.2	387.8 385.8	5006	225/25E-25N01 M		310.0	9-26-74 2-07-75	NM-1 NM-7	5612								
205/27E-29J01 M	4	406.0	10-03-74 2-05-75	21.0 NM-1	385.0	5006	238/24E-16R01 M		222.0	9-30-74 2-05-75	138.4 104.5	83.6 117.5	5612							
LIMDMORE I.D.																				
5-22-28																				
205/26E-01P01 M	4	360.0	9-30-74 2-03-75	68.2 57.9	291.8 302.1	5607	235/26E-08R01 M		345.0	9-24-74 2-03-75	180.4 168.0	164.6 177.0	5612							
205/26E-22C02 M	4	341.0	10-01-74 2-04-75	79.0 75.0	262.0 266.0	5607	ALPAUGH-ALLENTHORPE AREA													
208/26E-24K01 M	4	362.5	10-01-74 2-04-75	44.5 40.0	318.0 322.5	5607	238/24E-35A02 M		235.0	9-24-74 1-24-75	204.9 NM-1	30.1	5001							
205/26E-32A01 M	4	331.5	10-02-74 2-13-75	NM-1 62.5	248.9 265.5	5607 5609	245/23E-05R02 M		210.0	9-25-74 1-24-75	281.7 228.3	- 71.7 - 18.3	5001							
205/27E-29E01 M	4	392.0	10-02-74 2-06-75	25.5 18.0	366.5 374.0	5607	245/23E-21B02 M		205.0	9-25-74 1-24-75	68.9 68.7	136.1 136.3	5001							
2-07-75																				
5-22-29																				
KAWAHARA I.D.																				
5-22-30																				

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATS WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER LEVEL IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE	STATS WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER LEVEL IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE
ALPAUGH-ALLENSTWORTH AREA													
5-22.34													
24S/24E-20R01 M		218.0	9-24-74 1-24-75	NM-1 215.5	2.5	5001	295/25E-12M03 M	2	330.0	9-30-74 2-05-75	108.5 181.0	141.5 149.0	5133
24S/24E-22R01 M		233.0	9-24-74 1-23-75	240.1 163.0	-7.1 70.0	5001	305/25E-18R01 M		300.0	9-25-74 1-29-75	100.0 102.0	200.0 198.0	5050
24S/24E-34P01 M		232.0	9-24-74 1-24-75	98.7 86.2	133.3 145.8	5001	305/25E-22D01 M		308.5	10-01-74 2-01-75	91.4 92.1	217.1 216.4	5640
24S/25E-17P01 M	3	268.0	9-24-74 1-23-75	118.0 106.5	150.0 161.5	5001	305/26E-22P02 M	2	338.0	10-01-74 2-04-75	120.5 108.5	217.5 229.5	5133
OELANO-EARLMARSH I.D.													
5-22.35													
23S/25E-26K01 M	1	303.0	10-04-74 1-10-75	164.0 141.0	139.0 162.0	5613	305/28E-32B01 M	1	353.0	9-26-74 1-23-75	114.0 110.4	240.4 244.0	5001
23S/26E-29P01 M		357.0	10-07-74 1-30-75	167.5 NM-1	189.5 275.0	5613	31S/27E-04J02 M		340.0	10-01-74 2-04-75	149.0 141.5	191.0 198.5	5133
23S/27E-27G01 M	4	552.0	9-26-74 1-22-75	123.5 277.0	180.5 275.0	5001	31S/27E-28J01 M	1	312.1	10-01-74 2-04-75	81.5 93.5	230.6 218.6	5133
24S/25E-10A01 M	3	304.0	9-30-74 1-29-75	123.5 109.5	247.5 194.5	5613	31S/28E-30M01 M	3	314.7	9-27-74 1-30-75	90.0 75.0	224.7 239.7	5050
24S/25E-33J01 M		292.0	9-30-74 1-28-75	44.5 45.5	245.5 246.5	5613	32S/27E-18E01 M	3	292.6	9-27-74 1-30-75	145.0 125.0	147.6 167.6	5050
24S/26E-05R01 M	4	376.0	10-04-74 1-30-75	166.0 158.0	210.0 218.0	5613	32S/28E-04B01 M		301.0	9-24-75 1-20-75	NM-1 NM-1	5001	
EDISON-MARICOPA AREA													
5-22.41													
24S/26E-20H01 M	4	378.0	10-03-74 1-29-75	134.0 124.0	244.0 254.0	5613	31N/19W-24H01 S		737.0	9-30-74 2-06-75	589.4 582.3	147.6 154.7	5644
24S/26E-29R02 M	1	401.0	10-04-74 1-28-75	126.0 120.0	275.0 280.0	5613	31N/19W-10A01 S	1	612.0	9-30-74 2-11-75	472.9 479.9	139.1 136.1	5644
24S/26E-32G01 M	1	397.0	10-03-74 1-28-75	108.0 125.0	289.0 272.0	5613	31N/20W-07Q01 S	3	452.3	1-31-75	283.0	169.3	5050
25S/26E-10B03 M	4	430.0	10-02-74 1-27-75	176.5 163.5	253.5 266.5	5613	31N/20W-24E01 S		740.0	2-01-74	585.0	155.0	5050
25S/26E-16P01 M		388.0	9-23-74 1-23-75	99.2 89.5	289.8 298.5	5001	31N/21W-05M01 S	3	515.9	1-31-75	420.0	95.9	5050
25S/27E-22H01 M	4	750.0	9-23-74 1-20-75	474.0 NM-1	276.0 275.0	5001	29S/29E-33N01 M	4	580.0	9-17-74 1-21-75	442.3 426.3	137.7 153.7	5644
SOUTHERN SAN JOAQUIN M.U.D.													
5-22.36													
25S/25E-36R02 M		335.0	9-26-74 1-30-75	205.4 160.0	129.6 175.0	5614	30S/28E-10N01 M		373.0	9-26-74 1-23-75	56.0 57.2	317.0 315.8	5001
25S/26E-28H02 M		415.0	9-27-74 1-31-75	204.6 201.6	210.4 213.4	5614	30S/28E-10N04 M		373.0	9-26-74 1-23-75	207.5 197.5	165.5 175.5	5001
26S/26E-16P01 M		443.0	9-26-74 1-31-75	NM-3 NM-3	NM-3 NM-3	5614	30S/29E-05F01 M		515.0	9-18-74 1-21-75	375.2 375.2	139.8 139.8	5644
NORTH KERN W.S.D.													
5-22.37													
26S/25E-15P01 M	3	348.0	9-23-74 1-27-75	243.0 195.0	109.0 153.0	5050	30S/29E-27A01 M	1	575.0	9-20-74 1-27-75	447.0 442.5	128.0 132.5	5644
26S/25E-15R01 M	3	352.3	9-23-74 1-27-75	195.0 195.0	157.3 157.3	5050	30S/30E-20R01 M	4	794.0	10-17-74 2-28-75	232.3 NM-1	561.7 561.7	5644
26S/26E-30P01 M	2	392.0	1-30-75	255.0	137.0	5050	31S/29E-04P01 M		459.0	9-23-74 1-29-75	312.5 292.5	126.5 166.5	5644
27S/25E-01N01 M	3	394.0	9-25-74 1-31-75	117.0 106.0	277.0 288.0	5050	31S/29E-29A01 M		400.0	9-24-74 1-20-75	154.5 184.9	245.5 255.1	5001
27S/25E-01N03 M	2	394.0	9-25-74 1-31-75	301.0 271.0	93.0 123.0	5050	31S/30E-21G01 M	4	536.0	10-10-74 2-19-75	364.2 358.5	171.8 177.5	5644
27S/26E-20D01 M	1	445.3	9-25-74 1-31-75	340.0 NM-1	105.3 275.0	5050	32S/28E-23R01 M		386.0	10-10-74 2-20-75	255.6 260.4	130.4 125.6	5644
27S/27E-30H02 M	4	525.0	9-23-74 1-20-75	479.0 324.0	46.0 201.0	5001	32S/29E-19H02 M		416.0	10-15-74 2-26-75	199.9 197.8	216.1 218.2	5644
28S/25E-13L01 M	3	361.1	9-24-74 1-28-75	240.0 218.0	121.1 143.1	5050	32S/29E-19H03 M		416.0	10-15-74 2-26-75	339.0 322.3	77.0 93.7	5644
BUENA VISTA W.S.D.													
5-22.42													
28S/24E-21H01 M	3	388.0	9-23-74 1-28-75	181.0 179.0	207.0 209.0	5050	27S/22E-21F02 M		240.0	9-27-74 1-29-75	16.0 18.0	224.0 222.0	5133
28S/26E-21M03 M	2	389.0	9-23-74 1-28-75	275.0 250.0	113.0 138.0	5050	27S/22E-32M01 M	1	241.0	9-27-74 1-29-75	141.0 136.0	100.0 105.0	5133
SHAPTER-WASCO 1.0.													
5-22.38													
27S/24E-01L02 M		322.0	9-23-74 1-27-75	295.1 250.5	26.9 71.5	5616	28S/22E-09H01 M	3	240.0	9-27-74 1-29-75	12.5 12.5	227.5 227.5	5133
27S/24E-35C01 M	3	321.8	9-24-74 1-29-75	NM-1 252.0	NM-1 69.8	5050	28S/23E-31R01 M		257.8	10-01-74 2-01-75	26.2 36.1	231.6 221.7	5640
27S/25E-28A01 M	3	375.0	9-26-74 1-28-75	283.0 260.0	92.0 115.0	5050	29S/23E-08A01 M		259.0	10-01-74 2-01-75	37.7 48.8	221.3 210.2	5640
28S/25E-16P01 M		329.0	9-25-74 2-03-75	240.5 217.0	89.5 112.0	5616	29S/23E-27M01 M	1	270.0	9-27-74 1-31-75	55.5 59.5	214.5 210.5	5133
KERN RIVER DELTA AREA													
5-22.40													
28S/26E-29L01 M	3	350.0	9-26-74 2-04-75	201.5 NM-1	148.5 148.5	5616	30S/23E-01D01 M		276.8	9-01-74 2-01-75	73.0 84.7	203.8 192.1	5640

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE	STATE WELL NUMBER	AQUFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE					
BUENA VISTA W.S.D.																		
5-22-42																		
30S/24E-02C01 M		288.7	10-01-74 2-01-75	112.6 107.5	176.1 181.2	5640	20S/22E-35R01 M		216.0	11-06-74 2-20-75	45.0 55.0	171.0 161.0	5050					
30S/24E-04C01 M	1	282.0	9-27-74 1-31-75	87.5 91.5	194.5 190.5	5133	21S/22E-27A01 M		196.0	11-06-74 2-20-75	10.0 9.5	186.0 186.5	5050					
31S/25E-26A01 M		289.0	10-02-74 1-30-75	84.0 66.0	205.0 223.0	5133	22S/22E-01B02 M		201.0	11-06-74 2-20-75	5.2 6.5	195.8 194.5	5050					
SEMITROPIC W.S.D.																		
5-22-43																		
25S/22E-02N02 M	1	212.0	9-25-74	NM-6	5133	22S/22E-05L01 M	2	188.0	2-20-75	NM-6			5050					
25S/22E-14G01 M		215.0	9-25-74	256.5	- 41.5	5133	22S/22E-12A01 M	2	192.0	11-06-74 2-20-75	117.0 102.0	75.0 90.0	5050					
25S/23E-28D01 M		217.0	9-26-74 1-29-75	111.0 103.0	106.0 114.0	5133	22S/22E-13P01 M	1	193.0	11-06-74 2-20-75	NM-5 NM-6		5050					
25S/23E-28D03 M	2	217.0	9-26-74 1-29-75	NM-3 NM-3	5133	22S/22E-22N01 M	2	191.0	11-06-74	NM-6			5050					
25S/24E-10K01 M	1	240.0	9-25-74 1-23-75	57.6 56.0	182.4 184.0	5001	MENDOTA-HURON AREA											
25S/24E-15H01 M		248.0	9-25-74 1-23-75	75.2 73.2	172.7 174.8	5001	13S/12E-22N01 M	2	280.0	10-17-74 3-25-75	90.4 90.0	189.6 190.0	5607					
25S/24E-30J01 M		238.0	9-25-74 1-28-75	NM-7 NM-7	5133	14S/15E-18E02 M		178.0	12-19-74	NM-6			5050					
26S/21E-14J01 M	1	237.0	9-23-74 1-27-75	28.0 36.0	209.0 201.0	5133	15S/14E-15B04 M		236.0	12-17-74 1-27-75	NM-4 NM-6		5050					
26S/22E-21D01 M	2	240.0	9-23-74 1-28-75	35.0 36.0	205.0 204.0	5133	15S/15E-22001 M		175.0	10-16-74 1-27-75	72.7 81.0	102.3 94.0	5001					
26S/23E-02R01 M	2	234.9	9-26-74 1-29-75	NM-7 NM-9	5133	15S/16E-17L01 M		165.0	10-17-74 1-16-75	42.7 42.6	122.3 122.4	5621						
26S/24E-23H01 M	2	295.5	9-27-74 1-30-75	322.0 249.0	- 26.5 46.5	5050	15S/16E-28A04 M		164.0	12-20-74 1-16-75	130.0 129.7	34.0 34.3	5620					
27S/23E-01R01 M	1	267.0	9-24-74 1-28-75	97.5 96.5	169.5 170.5	5133	17S/14E-13R01 M	1	457.0	12-23-74	630.0	- 173.0	5050					
27S/23E-01R04 M	2	267.0	9-24-74 1-28-75	303.5 257.5	- 36.5 9.5	5133	17S/16E-12E03 M		290.0	10-16-74 1-17-75	60.0 58.5	230.0 231.5	5001					
27S/23E-01R05 M	2	267.0	9-24-74 1-28-75	294.5 249.5	- 27.5 17.5	5133	17S/16E-30A05 M		290.0	10-16-74 1-17-75	349.2 358.7	- 59.2 - 68.7	5001					
27S/23E-09C01 M		260.0	9-26-74 1-31-75	289.0 283.0	- 29.0 - 23.0	5133	17S/17E-20N01 M	3	228.0	12-19-74	NM-1		5050					
28S/23S-11B01 M		255.0	10-01-74 2-01-75	39.0 43.5	216.0 211.5	5640	18S/17E-12N01 M	2	253.0	12-19-74	245.0	8.0	5050					
29S/24E-14R01 M	1	290.0	10-00-74	NM-0	5133	19S/18E-15M01 M	2	274.0	2-06-74	245.0	29.0		5050					
AVENAL-MCKITTRICK AREA																		
5-22-44																		
24S/19E-10P01 M		330.0	2-19-74 5-20-74	24.1 24.0	305.9 306.0	5050	20S/18E-36D01 M		260.0	12-17-74	198.0	62.0	5050					
25S/19E-20Q02 M	1	480.0	9-23-74 1-27-75	117.6 106.6	362.4 373.4	5133	21S/18E-28N02 M		363.0	12-17-74	335.0	28.0	5050					
25S/20E-04C01 M	1	268.0	8-26-74 11-19-74	45.5 NM-6	222.5	5050	POGO RESOURCES C.D.											
26S/18E-19B02 M	1	875.0	9-23-74 1-27-75	165.0 164.0	710.0 711.0	5133	17S/18E-05G01 M		117.0	3-18-75	8.0	108.2	5529					
28S/22E-20M01 M		290.0	11-19-74 3-18-75	67.0 68.0	223.0 222.0	5050	TERRA BELLA I.D.											
TULARE LAKE-LOST MILLS AREA																		
5-22-45																		
22S/19E-18P02 M	1	255.0	11-18-74 3-17-75	176.0 175.0	79.0 80.0	5050	MERCED BOTTOMS											
22S/21E-01J01 M	2	185.5	2-20-75	94.0	91.5	5050	07S/10E-23K01 M		80.0	11-12-74 3-03-75	16.0 4.5	64.0 75.5	5050					
23S/19E-14B01 M	1	235.0	11-18-74 3-17-75	32.0 33.5	203.0 201.5	5050	07S/10E-23K02 M		80.0	11-12-74 3-03-75	4.3 3.5	75.7 76.5	5050					
24S/20E-21N02 M	1	233.0	3-17-75	NM-0	5050		07S/12E-27F01 M		110.5	11-12-74 2-28-75	12.0 10.0	98.5 100.5	5050					
24S/21E-15J01 M		211.0	2-19-75	19.5	191.5	5050	08S/12E-19D01 M		90.0	2-27-75	12.0	78.0	5050					
24S/21E-36B01 M		210.0	2-19-75	17.5	192.5	5050	09S/12E-06A02 M	1	550.0	9-14-74 2-20-75	101.0 99.0	449.0 451.0	5619					
24S/22E-20A02 M		207.0	11-06-74 2-19-75	233.0 197.0	- 26.0 - 16.0	5050	5-22-54											
24S/22E-35E01 M		213.0	11-06-74 2-19-75	263.0 212.0	- 50.0 - 1.0	5050	09S/12E-01B01 M		180.0	11-12-74 2-26-75	89.0 69.0	91.0 111.0	5050					
26S/22E-30K01 M	1	237.5	8-27-74 11-19-74	35.5 NM-6	202.0	5050	09S/14E-01B02 M		180.0	11-12-74 2-26-75	85.0 66.0	95.0 114.0	5050					

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER ELEVATION IN FEET	AGENCY CODE	STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER ELEVATION IN FEET	AGENCY CODE
MERCED BOTTOMS													
				5-22.54									
09S/14E-01B03 M		180.0	11-12-74 2-26-75	40.0 39.0	140.0 141.0	5050							
09S/14E-06D01 M		141.0	11-12-74 1-20-75	48.0 43.4	93.0 97.6	5050 5001							
GARFIELD W.D.													
				5-22.65									
12S/20E-13H01 M	4	387.0	10-03-74 2-03-75	97.6 96.4	299.4 290.6	5622							
12S/21E-07A02 M	4	405.5	10-03-74 2-03-75	120.8 120.0	284.7 285.4	5622							
12S/21E-18A03 M	4	390.5	10-03-74 2-03-75	94.4 94.0	296.1 296.5	5622							
KINGS COUNTY W.D.													
				5-22.66									
17S/20E-36R02 M	1	243.0	9-18-74 1-30-75	17.3 16.1	225.7 226.9	5129							
17S/22E-11P01 M	1	283.0	9-18-74 1-30-75	22.3 22.9	260.7 260.1	5129							
17S/22E-35N01 M	1	266.0	9-18-74 1-30-75	43.1 35.9	222.9 230.1	5129							
18S/21E-17N01 M	1	238.0	9-18-74 1-30-75	11.1 10.9	226.9 227.1	5129							
18S/22E-21H01 M	1	258.0	9-18-74 1-30-75	85.1 NM-6	172.9	5129							
18S/22E-36P01 M		245.0	10-09-74 1-30-75	73.7 83.5	171.3 161.5	5129 5603							
18S/23E-29B01 M	1	263.0	9-20-74 1-30-75	112.2 111.9	150.8 151.1	5129							
19S/21E-20N01 M	1	225.0	9-20-74 2-06-75	10.3 10.7	214.7 214.3	5129							
19S/22E-04B01 M	1	245.0	9-19-74 1-30-75	129.4 127.3	115.6 117.7	5129							
19S/22E-19A01 M	2	235.0	9-19-74 2-06-75	75.4 77.1	159.6 163.4	5129							
20S/21E-03A01 M		240.5	9-19-74 2-06-75	78.6 77.1	161.9 163.4	5129							
20S/21E-03A01 M		220.0	10-10-74 2-20-75	9.5 14.5	210.5 205.5	5603							
20S/21E-05E01 M	2	219.0	9-20-74 2-06-75	155.6 153.1	63.4 65.9	5129							
20S/22E-10H02 M	2	225.0	9-24-74 2-07-75	117.5 NM-9	107.5	5129							
PLEASANT VALLEY													
				5-22.69									
20S/15E-25D01 M	1	619.0	1-03-75	DRY		5050							
20S/15E-32A01 M	1	675.0	1-03-75	247.0	428.0	5050							
21S/16E-02N01 M	1	570.0	1-02-75	258.0	312.0	5050							
21S/16E-08E01 M	1	664.0	1-02-75	234.0	361.0	5050							
21S/16E-35D01 M	1	682.0	1-02-75	363.0	319.0	5050							

APPENDIX D
SURFACE WATER QUALITY

APPENDIX D

SURFACE WATER QUALITY

Introduction

Appendix D summarizes the surface water quality for the San Joaquin Valley for 1975 water year (October 1, 1974, through September 30, 1975). These data were obtained from 101 surface water quality sampling stations.

Laboratory analyses of surface water samples performed by the Department of Water Resources' laboratory reported herein are in accordance with the 13th Edition of "Standard Methods for the Examination of Water and Waste Water".

Each station in this appendix has been assigned an eight digit identification number. The first two digits denote the drainage basin as shown below; the remaining digits identify each station.

<u>Hydrographic Area B San Joaquin River Basin</u>		<u>Hydrographic Area C Tulare Lake Drainage Basin</u>	
B0	San Joaquin Valley Floor	C0	Tulare Lake Valley Floor
B3	Stanislaus River	C1	Kings River
B4	Tuolumne River	C2	Kaweah River
B5	Merced River	C3	Tule River
B6	Fresno-Chowchilla Rivers	C4	Greenhorn Mountains
B7	San Joaquin River	C5	Kern River
B8	San Joaquin Valley on West Side	C6	Tehachapi Mountains
		C7	Tulare Lake Basin on West Side

TABLE D-I
SAMPLING STATION DATA AND INDEX
FOR
SURFACE WATER

Station	Station Identification Number	Location ^a	Period ^b of Record	Frequency ^c of Sampling	Sampled By ^d	Analysis on Page
Bear Creek above Bear Creek Reservoir	B55152.10	6S/16E-22Q	February 1974		DWR	173, 188, 196
Big Creek above Pine Flat Reservoir	C11320.00	11S/25E-4	--	S	DWR	176, 189, 197, 200
Burkhard Drain	B00936.30	4S/7E-4L	June 1975			168, 184, 193
Burns Creek at Merced-Mariposa County Line	B56152.50	6S/16E-19D	February 1974		DWR	173, 182, 188, 196
Caliente Creek above Tehachapi	C61575.00	30S/32E-17P				179
Canal Creek at Oakdale Road	B05166.50	6S/13E-10K	February 1974		DWR	170, 182, 185, 193
Chowchilla River near Raymond	B64200.00	8S/18E-01R	July 1958	S	DWR	174
Deadman Creek at Baxter Road	B06399.50	8S/17E-17M	February 1974		DWR	170, 186, 194
Delta-Mendota Canal to Mendota Pool	B00770.00	13S/15E-19Q	July 1952	S	DWR	168, 184
Dutchman Creek at Baxter Road	B06369.50	8S/17E-20N	February 1974		DWR	170, 185, 194
Fresno River near Daulton	B67150.00	10S/19E-03	January 1985	S	DWR	174
Friant-Kern Canal at Friant	B71910.00	11S/21E-05P	March 1974	Q	DWR	175
Griswold Creek above Panoche Valley	B81253.10	16S/10E-13C				175
Kaweah River above Lake Kaweah	C21210.30	17S/28E-34	December 1974	S	DWR	177, 189, 197
Kaweah River at Lemoncove	C02550.30	18S/27E-3	--	S	DWR	175, 189, 197
Kaweah River Middle Fork below No. 2 Intake near Three Rivers	C23147.00	16S/29E-33	--	S	DWR	177, 189, 198
Kaweah River North Fork near Mouth	C22010.30	17S/28E-13	--	S	DWR	177, 189, 198
Kaweah River South Fork above Grouse Creek	C24201.50	18S/29E-16	--	S	DWR	177, 189, 198
Kaweah River below Terminus Dam	C02185.00	17S/27E-25	September 1961	Q	DWR	175, 182, 200
Kaweah River at Three Rivers	C21250.00	17S/28E-13N	April 1951	S	DWR	177
Kerckhoff Reservoir near Auberry	B71188.00	9S/22E-24P	March 1974	S	DWR	174
Kern River near Bakersfield	C05150.00	28S/29E-33	April 1951	Q	DWR	176, 182, 200
Kern River above Fairview	C51660.10	23S/32E-12	--	S	DWR	179, 190, 197
Kern River at Hart Park	C05160.10	28S/28E-36	--	S	DWR	176, 189, 197
Kern River below Isabella Dam	C51350.00	26S/33E-30E	--	S	DWR	173
Kern River at Kernville	C51500.00	25S/33E-15	--	S	DWR	179, 190, 198
Kern River at Miracle Hot Springs	C51220.10	27S/32E-15	--	S	DWR	178, 190, 198
Kern River at Rancheria Bridge	C05180.10	29S/29E-11	--	S	DWR	176, 189, 197
Kern River South Fork near Weldon	C53110.10	26S/34E-10	--	S	DWR	179, 190, 198
Kings River below North Fork	C11460.00	12S/26E-21	--	S	DWR	177, 189, 197
Kings River below Peoples Weir	C01140.00	17S/22E-01	April 1951	Q	DWR	175
Kings River near Piedra	C11115.50	13S/24E-06B	February 1974		DWR	176, 189, 197
Kings River below Pine Flat Reservoir	C11140.00	13S/24E-02	September 1955	Q	DWR	176, 182
Kings River South Fork at Cedar Grove	C14115.30	13S/30E-1	--	S	DWR	177, 189, 197
Mariposa Creek above Mariposa Reservoir	B62204.10	7S/17E-17A	February 1974		DWR	174, 182, 188, 197
Merced River at Bagby	B51320.00	04S/17E-6	November 1952	S	DWR	173, 188, 196
Merced River above Briceburg	B51410.10	03S/18E-25	October 1972	S	DWR	173, 188, 196
Merced River below El Portal	B51517.10	03S/20E-18	October 1972	S	DWR	173, 188, 196

TABLE D-1 (Continued)
SAMPLING STATION DATA AND INDEX
FOR
SURFACE WATER

Station	Station Identification Number	Location ^a	Period ^b of Record	Frequency ^c of Sampling	Sampled By	Analysis on Page
Merced River below Exchequer Dam	B51200.00	04S/15E-13	April 1951	Q	DWR	173, 182, 196 200
Merced River at Happy Isles Bridge near Yosemite	B51700.00	02S/21E-	--	S	DWR	173, 188, 196
Merced River at Junction Big Oak Flat Road and Highway 140	B51519.50	02S/21E-	February 1973	S	DWR	173, 188, 196
Merced River at Milliken Bridge	B05131.00	06S/09E-36	April 1951	M	DWR	170, 185, 193 200
Modesto Sewage Treatment Plant	B04942.30	4S/8E-3C	July 1975			169, 185, 193
Musick Creek #1 near Shaver Lake	B71406.00	10S/24E-2E	November 1974			174
Musick Creek #2 near Shaver Lake	B71408.00	10S/24E-3P	October 1974			175
Newman Wasteway	B00349.10	17S/9E-16J	June 1975			168, 184, 193
Owens Creek above Owens Reservoir	B62020.10	7S/16E-12H	February 1974		DWR	174, 188, 196
Poso Creek below Glennville	C44950.10	25S/30E-35M	December 1974			178
Salt Slough near Stevenson	B00470.00	08S/10E-10	December 1961	Q	DWR	168, 182, 184 193, 200
San Joaquin River at Crows Landing Bridge	B07250.00	6S/9E-07A	January 1957		DWR	171, 186, 195
San Joaquin River at Fremont Ford Bridge	B07375.00	07S/09E-24	July 1955		DWR	171, 182, 186, 187, 195, 200
San Joaquin River at Friant Dam	B07885.00	11S/21E-07	April 1951		DWR	172, 182, 187
San Joaquin River near Grayson	B07080.00	04S/07E-25	April 1959	M	DWR	171, 186, 194
San Joaquin River below Kerckhoff near Frather	B71180.00	10S/22E-10C	October 1974			174, 182
San Joaquin River at Maze Road Bridge	B07040.00	03S/07E-33	April 1951	M	DWR	170, 171, 186 194, 200
San Joaquin River near Mendota	B07710.00	13S/15E-07	April 1951	M	DWR	171, 187
San Joaquin River at North Fork Road Bridge	B07886.50	11S/21E-07H	February 1974		DWR	172, 187, 195
San Joaquin River at Patterson Bridge	B07200.00	5S/8E-15M	February 1958		DWR	171, 186, 194
San Joaquin River below Shakeflat Creek	B71532.50	7S/24E-10	--	S	DWR	175, 188, 194
San Joaquin River South Fork at Mono Hot Springs	B74250.50	7S/27E-10	--	S	DWR	175, 188, 197
San Joaquin River near Vernalis	B07020.00	03S/06E-13	April 1951	M	DWR & USBR	179, 180, 182, 190, 191, 194, 200
San Joaquin River above Willow Creek near Auberry	B71340.00	9S/23E-15	--	S	DWR	174, 188, 197
Stanislaus River at Knights Ferry	B03185.00	1S/12E-29	--	S	DWR	169, 184, 193
Stanislaus River at Koetitz Ranch	B03115.00	03S/07E-02	April 1951	M	DWR	168, 169, 184 193
Stanislaus River Middle Fork at Beardsley	B33255.00	5N/18E-31	--	S	DWR	172, 187, 195
Stanislaus River Middle Fork at Dardanelle	B33480.10	6N/20E-30	--	S	DWR	172, 187, 195
Stanislaus River North Fork at Calaveras Big Trees State Park	B32110.10	5N/15E-24	--	S	DWR	172, 187, 195
Stanislaus River at Parrotts Ferry Bridge	B31400.50	2N/13E-9	--	S	DWR	172, 187, 195
Stanislaus River below Tulloch Dam	B31158.10	01S/12E-02	August 1956	Q	DWR	172, 182, 200
Sullivan Creek at Jacksonville Road	B41231.50	01N/14E-35C	November 1973			187, 195

TABLE D-I (Continued)
SAMPLING STATION DATA AND INDEX
FOR
SURFACE WATER

Station	Station Identification Number	Location ^a	Period ^b of Record	Frequency ^c of Sampling	Sampled By	Analysis on Page
Tehachapi Creek near Tehachapi	C61540.00	32S/32E-16P				179
Tejon Creek at Comanche Point Oil Field	C62050.30	12N/18W-26N	January 1970			179
Tile Drain near Patterson	B00955.30	5S/8E-21L	July 1975			168, 184
Tule River North Fork at Bear Creek Road	C32190.10	20S/29E-35	--	S	DWR	178, 190, 198
Tule River South Fork above Crew Creek	C34149.30	22S/29E-4		S	DWR	178, 190, 198
Tule River South Fork of Middle Fork near Springville	C33200.00	20S/30E-	--	S	DWR	178, 190, 198
Tule River below Springville	C31929.30	21S/29E-17	--	S	DWR	178, 190, 198
Tule River below Success Dam	C03196.00	21S/28E-35	July 1956	Q	DWR	176, 182, 200
Tule River at Worth Bridge near Porterville	C03195.00	22S/28E-3	--	S	DWR	175, 176, 189, 197
Tuolumne River above Don Pedro Reservoir	B41265.50	1S/15E-20B	March 1966	S	DWR	172
Tuolumne River above Early Intake	B41680.10	1S/18E-1	--	S	DWR	173, 188, 195
Tuolumne River at La Grange Bridge	B04175.00	03S/14E-20	--		DWR	169, 185, 193, 200
Tuolumne River at Tuolumne City	B04105.00	04S/08E-12	April 1951	M	DWR	169, 184, 193, 200
Tuolumne River at Tuolumne Meadows	B41850.10	1S/24E-3	--	S	DWR	173, 188, 195
Tuolumne River at Wards Ferry Bridge	B41290.10	1S/15E-2	--	S	DWR	172, 187, 195
Turlock Irrigation District Lateral Drain #2	B04974.30	4S/7E-25G	June 1975		DWR	169, 185, 193
Turlock Irrigation District Lateral Drain #5	B04975.30	5S/8E-25R	June 1975		DWR	170, 185, 193
Turlock Irrigation District Lateral Drain #6 and #7	B04976.30	6S/9E-22H	June 1975		DWR	170, 185, 193
Turlock Sewage Treatment Plant	B04921.30	5S/10E-21K	July 1975		DWR	169, 185, 193
Woods Creek at County Fairgrounds	B41239.50	2N/14E-36P	October 1973		DWR	187, 195
Woods Creek at Jack Page Road above Sonora	B41241.50	2N/14E-25B	October 1973		DWR	187, 195
Woods Creek below Jamestown Sewage Treatment Plant	B41235.50	1N/14E-15M	October 1973		DWR	187, 195
Woods Creek at Slate Creek	B41232.50	1N/14E-33H	October 1973		DWR	187, 195
Woods Creek below Sonora Sewage Treatment Plant	B41238.50	1N/14E-01N	October 1973		DWR	187, 195
Westly Wasteway	B00109.30	4S/7E-26K	June 1975		DWR	168, 184, 193
LAKES						
Lake McClure at Bagby	B5R736700791	4S/17E-6	1975		DWR	173, 196
Lake McClure near McClure Point	B5R735701621	4S/15E-12	September 1974		DWR	173, 196
Lake McClure at Inlet (head)	B5R736200611	4S/17E-19E	1975		DWR	196
Lake McClure at Barrett Cove	B5R738801731	3S/15E-35A	1975		DWR	196
Lake McClure at Lower Horseshoe Bend	B5R740501381	3S/16E-17F	1975		DWR	196
Lake McClure at Upper Horseshoe Bend	B5R741601611	3S/16E-8F	1975		DWR	196

- a. Location of sampling stations is shown on Figure E-1.
 b. Beginning of record (-- indicates an irregular period of record).
 c. M - Monthly, Q - Quarterly, S - Semiannually, all others irregular.
 d. DWR - Dept. of Water Resources, USGS - U. S. Geological Survey.

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

Abbreviations, Chemical Symbols, and Codes used
in this table are:

<u>Abbreviations</u>			
TEMP	Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)	DO	Dissolved oxygen content in milligrams per litre
SAT	Percent Saturation	GH	Gage height in feet above an established datum
Q	Flow	FLD	Field Determination
LAB	Laboratory	EC	Specific electrical conductance in micromhos at 25° Celsius
PH	Measure of acidity or alkalinity of water	TDS	Total Dissolved Solids
SUM	Summation of Analyzed Constituents	TH	Total Hardness
NCH	Noncarbonate Hardness	TURB	Turbidity in Turbidity Units
SAR	Sodium Adsorption Ratio		
REM	Remarks as follows:		
T	Total Dissolved Solids and the calculated sum of constituents are <u>not</u> within 20 percent of each other.		
E	Total Dissolved Solids value is <u>not</u> within the range of 0.35 to 0.70 of the Specific Electrical Conductance.		
S	The anion and cation sums are <u>not</u> within the prescribed tolerance of ± 5 percent.		
X	The field EC and the laboratory EC are <u>not</u> within 20 percent of each other.		

Chemical Symbols

CA	Calcium	SO ₄	Sulphate
MG	Magnesium	CL	Chloride
NA	Sodium	NO ₃	Nitrate
K	Potassium	F	Fluoride
CO ₃	Carbonate	B	Boron
HCO ₃	Bicarbonate	SiO ₂	Silica

Sampler (SAMP) and Laboratory (LAB) Codes

5001	U. S. Bureau of Reclamation
5050	Department of Water Resources

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	O.M. O DEPTH	DO SAT	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MICROEQUIVALENTS PER LITER	MILLIGRAMS PER LITER										PERCENT REACTANCE VALUE	B HC03 SO4 CL NO3	F TOS SUM NCM SAR	TURB REM	
							CA	MO	NA	K	CO3	HCO3	SO4	CL	NO3	TOS	SUM	NCM	SAR		
80 0109.30 WESTLEY WASTEWAY																					
06/25/75 0945	5050 5001	10.5 11.0	64 18	F C	B+0 8.0	458	--	--	--	--	0	89	--	--	--	--	--	--	--	14.8	160C
07/23/75 0820	5050 5001	11.3 13.1	73 23	F C	B+5 6.5	668	--	--	--	--	0	128	--	--	--	--	--	--	--	15.2	120AF
80 0348.10 NEWMAN WASTEWAY																					5
06/24/75 1030	5050 5001	5.4 5.9	66 19	F C	7.9 7.3	1070	--	--	--	--	--	--	--	--	--	--	--	--	--	20.0	35C
07/22/75 0930	5050 5001	2.4 2.8	73 23	F C	7.3 7.3	1050	--	--	--	--	0	240	--	--	--	--	--	--	--	21.6	20AF
09/30/75 1005	5050 5001	1.3 1.4	68 20	F C	7.6 7.6	1290	--	--	--	--	0	334	--	--	--	--	--	--	--	22.0	17AF
80 0470.00 SALT SLOUGH NR STEVINSON																					5
12/19/74 1310	5050 5050	21.20 89	50.0F 10.0C	F B.2	7.6 2410	1650	103	60	332	--	0	262	429	401	4.01	2.20	--	1540	504	6.4	A
04/03/75 0900	5050 5050	8.3 79	55.4F 13.0C	F 6.0	7.7 1960	1550	100	45	246	--	0	182	395	300	--	2.10	--	1240	435	286	5.1
05/21/75 123n	5050 5050	62.6F 17.0C	7.4 7.9	F 1960	1300	3,64	2,80	8,08	13	--	0	189	201	252	6.7	.60	--	925	322	881	167
05/28/75 1130	5050 5050	21.43 11.7	71.6F 22.0C	F 8.2	8.1 1340	1200	64	30	170	--	0	174	165	226	--	.60	--	791	282	741	4.4
06/24/75 0945	5050 5001	6.4 7.0	68 20	F C	8.1 8.1	993	--	--	--	--	0	14	--	--	--	--	--	--	--	18.2	50C
07/22/75 0950	5050 5001	5.6 7.1	82 26	F C	7.8 7.8	867	--	--	--	--	0	124	--	--	--	--	--	--	--	21.6	30AF
08/20/75 1100	5050 5050	73 23	F 7.6	7.3 1160	1100	62	25	130	5.6	0	154	178	170	13.0	1.00	--	720	259	682	132	
08/27/75 1100	5050 5050	22.55 6.7	71.6F 22.0C	F 7.5	7.4 1300	1175	63	31	161	--	0	187	206	208	--	.90	--	785	286	762	4.2
80 0770.00 DELTA MENOTA CANAL TO MENOTA POOL																					5
12/11/74 1020	5050 5050	10.90 9.4	49.1F 9.5C	F B.0	8.3 530	340	25	13	58	--	0	87	93	54	4.5	.40	--	318	119	291	2.3
04/08/75 1030	5050 5050	15.20 9.4	55.4F 13.0C	F 7.9	7.5 425	310	24	12	42	--	0	85	59	56	--	.20	--	259	110	235	1.7
05/28/75 0800	5050 5050	7.4 84	71.5F 21.9C	F 8.0	7.1 317	320	17	9.8	28	--	0	73	31	35	--	.10	--	177	83	157	23
09/11/75 1100	5050 5050	15.50 8.6	73.4F 23.0C	F 8.0	7.6 468	390	25	13	46	--	0	107	50	56	--	.20	--	263	117	243	1.9
80 0936.30 BURKHARD DRAIN																					5
07/23/75 0930	5050 5001	7.9 9.0	72 22	F C	6.2 8.2	1R25	--	--	--	--	0	225	--	--	--	--	--	--	--	14.4	104AF
80 0955.30 TILE DRAIN NEAR PATTERSON																					5
07/22/75 1255	5050 5001	1.7 1.9	68 20	F C	7.3 7.3	2923	--	--	--	--	0	398	--	--	--	--	--	--	--	24.8	1AF
09/30/75 1400	5050 5001	4.5 4.9	69.0F 20.0C	F B.0	7.4 3000	--	--	--	--	0	371	--	--	--	--	--	--	--	--	1AF	
80 3115.00 STANISLAUS RIVER AT KOETITZ RANCH																					5
12/19/74 1510	5050 5050	32.64 9.5	50.9F 10.5C	F 7.7	7.2 7.7	70	7.6	3.4	3.8	--	0	40	40	4.0	1.4	1.5	.00	--	59	33	0.3
04/03/75 1140	5050 5050	32.79 9.5	51.4F 11.0C	F 7.7	7.3 120	85	11	5.5	4.6	--	0	60	6.4	1.6	--	.10	--	63	50	59	0.3
05/28/75 1600	5050 5050	36.79 9.9	63.5F 17.5C	F 7.2	7.3 50	45	4.3	2.6	2.6	--	0	98	1.3	0.5	--	.10	--	36	21	25	E A
06/25/75 1205	5050 5001	--	--	--	--	--	--	--	--	--	0	3.69	--	--	--	--	--	--	10.6		

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER L&B	G-H. DEPTH	DO SAT	TEMP C	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN CA MG NA K CO3 HC03 SO4 CL NO3	MILLIGRAMS PER LITER		MILLIGRAMS PER LITER		B SI02 SUM	F NCH	T05 10	TM 2	TURB SAR	REM 5	
							PFRCENT REACTANCE VALUE	8 1.41	6 1.41	4 1.41	2 1.41						
80 3115.00 STANISLAUS RIVER AT KOETITZ RANCH																	
07/23/75 111n	S500 5001	5500 3	A+ 95	75 24	F C	T ₅ 7.5	197	--	--	--	--	0 .00	86 1.41	--	--	--	19.6 76F
CONTINUED																	
08/27/75 1500	S500 5001	28.62 43	Bn 23.0C	73.4F 7.7	T ₅ 7.5	160 181	14 .70	9.0 .74	9.5 .41	--	0 .00	86 1.41	5.1 .17	6.4 .18	--	.00 --	114 89
							3W	40	22				80	10		2	72 0.5 T
80 3185.00 STANISLAUS RIVER AT KNIGHTS FERRY																	
06/18/75 1600	S500 5001	5500 103	9.9 17.0C	62.6F 7.4	E1 33	26 33	--	--	--	--	0 .00	17 .28	--	--	--	--	27 E
																	5
09/17/75 1700	S500 5001	5500 100	8.6 23.0C	73.4F 7.2	T ₅ 6.6	65 68	--	--	--	--	0 .00	35 .57	--	--	--	--	55 E
80 4105.00 TUOLUMNE RIVER AT TUOLUMNE CITY																	
12/19/74 1445	S500 5001	26.59 92	10.9 11.5C	52.7F 7.7	T ₁ 183	140 .55	11 .37	4.5 .74	17 .45	--	0 .00	42 4.3	4.1 .09	28 .79	2.4 .04	.00 --	113 88
							33	22	45				6	4.9 2		12 1.1	46 T
04/03/75 123n	S500 5001	25.44 90	9.45 13.2C	55.8F 7.8	T ₄ 300	230 .90	18 .60	7.3 .126	29 .126	--	0 .00	69 1.13	5.9 1.41	50 42	--	+10 --	159 144
							33	22	46				5	53 3		75 1.5	x
05/28/75 1400	S500 5001	24.10 48	7.5 24.0C	75.2F 7.9	T ₃ 434	400 1.33	26 .82	10 1.83	42 .46	--	0 .00	89 3.8	8.4 .17	79 2.23	--	+10 4	257 209
							33	21	46				5	58 4		106 33	1.6
06/25/75 1125	S500 5001	9.1 100	68 20	F C	T ₇ 530	--	--	--	--	0 .00	105 1.72	--	--	--	--	19.0 6C	
																5	
07/23/75 1000	S500 5001	7.1 84	75 24	F C	T ₅ 563	--	--	--	--	0 .00	117 1.92	--	--	--	--	28.0 BAF	
																5	
08/27/75 133n	S500 5001	23.45 97	8.2 24.0C	75.2F 7.6	T ₆ 605	400 1.70	34 1.15	14 2.65	61 2.65	--	0 .00	125 2.05	9.2 1.19	116 3.27	--	+10 3.59	364 296
							31	21	48				5	59 2.2		141 40	2.2
80 4175.00 TUOLUMNE RIVER AT LA GRANGE BRIDGE																	
04/04/75 0800	S500 5001	10.8 94	48.2F 9.0C	7.0 7.4	T ₀ 46	30 .22	4.4 .14	1.7 .08	1.8 .08	--	0 .00	21 71	5.4 .11	1.0 .03	--	.00 --	25 25
							50	32	18				5	6 3		16 1.2	x
05/29/75 083n	S500 5001	10.0 91	51.8F 11.0C	7.0 7.0	T ₀ 49	30 .42	4.0 .20	2.4 .08	1.8 .08	--	0 .00	24 81	2.6 .05	1.3 .04	--	.00 10	33 24
							30	42	17				5	8 8		20 1.2	T
06/14/75 1300	S500 5001	9.4 105	69.8F 21.0C	7.1 7.3	T ₁ 55	50 55	--	--	--	--	0 .00	26 4.3	--	--	--	--	40 E
																5	
09/24/75 1400	S500 5001	10.5 100	55.9F 13.3C	6.8 7.7	T ₀ 43	32 .26	5.2 .08	1.0 .08	1.8 .08	--	0 .00	21 83	3.4 .07	0 .00	--	.00 --	26 22
							62	19	19				5	17 0		17 0.2	x
80 41921.30 TURLOCK SEWAGE TREATMENT PLANT																	
06/24/75 1255	S500 5001	3.4 38	7.0 21	F C	T ₀ 9.0	685	--	--	--	--	20 .67	247 4.05	--	--	--	--	26.0 25C
																5	
07/22/75 114K	S500 5001	5.8 7.5	77 25	F C	T ₁ 8.9	621	--	--	--	--	23 .77	270 4.43	--	--	--	--	16AF 5
09/30/75 1345	S500 5001	11.6 134	73 23	F C	T ₃ 8.8	740	--	--	--	--	0 .00	303 4.97	--	--	--	--	17AF 5
80 4942.30 MODESTO SEWAGE TREATMENT PLANT																	
06/24/75 1405	S500 5001	3.0 34	72 22	F C	T ₀ 8.0	1650	--	--	--	--	0 .00	288 4.72	--	--	--	--	59.0 32C
																5	
07/22/75 1300	S500 5001	9.9 125	82 28	F C	T ₂ 9.2	1530	--	--	--	--	39 1.30	229 3.75	--	--	--	--	34AF 5
09/30/75 1455	S500 5001	0.0 25	77 25	F C	T ₄ 7.4	1510	--	--	--	--	0 .00	418 6.85	--	--	--	--	120AF 5
80 4974.30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 2																	
06/25/75 1335	S500 5001	12.9 133	63 17	F C	T ₆ 7.6	230	--	--	--	--	0 .00	74 1.21	--	--	--	--	15.4 7C
																5	
07/23/75 094n	S500 5001	8.8 107	73 23	F C	T ₀ 8.2	230	--	--	--	--	0 .00	80 1.31	--	--	--	--	44F 5

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. DEPTH	DO SAT	TEMP PH EC	FIELD LABORATORY	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER								MILLIGRAMS PER LITER							
							CA	MG	NA	K	C03	HCO3	S04	CL	N03	SiO2	0	F	TDS	TH	TURB	REH
80 4975.30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 5																						
07/22/75 1405	5050 5001	75 24	F C	8.2 7.7	432	--	--	--	0	129	--	--	--	--	--	--	--	--	--	21.6	64F	S
09/30/75 1545	5050 5001	7.3 81	F C	70 21	8.0 8.0	522	--	--	--	0	164	--	--	--	--	--	--	--	--	2.69	11AF	S
80 4976.30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 6 AND 7																						
06/24/75 1155	5050 5001	7.5 81	67.1F 19.5C	7.8	317	--	--	--	--	--	--	--	--	--	--	--	--	--	--	26.0	6C	
07/22/75 1100	5050 5001	6.8 79	F C	73 23	7.5 7.5	375	--	--	--	0	131	--	--	--	--	--	--	--	--	26.4	34F	25
09/30/75 1250	5050 5001	7.9 88	F C	70 21	7.8 7.8	401	--	--	--	0	112	--	--	--	--	--	--	--	--	21.0	10AF	S
80 5131.00 MERCEO RIVER AT MILLIKEN BRIDGE																						
12/19/74 1330	5050 5050	10.0 91	51.8F 11.0C	7.0	70	8.5 .42	2.6 .21	7.6 .33	--	0	41	5.3 .11	3.2 .09	3.3 .05	.00	--	--	72	32	0	0.6	EX
04/03/75 0940	5050 5050	10.2 96	54.5F 12.5C	7.3 7.4	55	7.4 .37	2.6 .21	4.2 .16	--	0	36	3.6 .07	1.9 .05	--	.00	--	--	36	29	0	0.3	X
05/28/75 1200	5050 5050	8.1 90	69.8F 21.0C	8.1 7.5	70	7.1 .35	3.0 .25	4.2 .10	--	0	37	7.2 .61	2.9 .15	--	.00	--	--	53	30	0	0.3	
06/24/75 0900	5050 5001	8.1 85	64F 18C	6.9 6.9	78	--	--	--	0	36	--	--	--	--	--	--	--	11.6	5C			
07/22/75 0910	5050 5001	7.2 93	84F 29C	7.2 7.2	150	--	--	--	0	58	--	--	--	--	--	--	--	18.6	44F	S		
08/27/75 1200	5050 5050	8.1 94	73.4F 23.0C	7.2 7.5	115	9.2 .46	4.4 .36	9.0 .39	--	0	55	5.1 .90	5.9 .11	--	.00	--	--	80	61	0	0.6	T
80 5166.50 CANAL CREEK AT DAKOALE ROAD																						
02/05/75 1730	5050 5050	10.2 92	50.9F 10.5C	7.3 6.5	45	5.7 .28	2.7 .22	4.1 .18	--	0	28	5.6 .46	3.0 .12	--	.20	--	--	84	25	2	0.4	EX
03/12/75 1530	5050 5050	10.3 25	59.6F 15.2C	7.2 6.4	55	5.6 .28	2.4 .20	3.6 .16	--	0	27	5.8 .44	1.7 .12	--	.10	--	--	38	26	2	0.3	
04/16/75 1630	5050 5050	10.8 150	55.0F 102	7.9 7.2	50	6.6 .33	1.8 .15	2.8 .12	--	0	29	3.1 .48	1.4 .06	--	.00	--	--	34	24	0	0.2	X
80 6369.50 DUTCHMAN CREEK AT BAXTER ROAD																						
02/05/75 0650	5050 5050	4.10 74	8.4F 9C	7.2 7.3	90	9.2 .46	5.6 .46	13 .57	--	0	58	10 .95	4.7 .21	--	.20	--	--	129	40	0	0.0	EX
03/12/75 0720	5050 5050	8.1 2.6	53.0F 75	7.9 11.7C	140	12 .60	8.8 .72	18 .78	--	0	100	A.1 1.64	7.2 .17	--	.20	--	--	142	66	0	1.0	1
04/16/75 0755	5050 5050	3.77 84	9.0F 12.0C	8.3 8.1	212	18 .90	14 .15	24 .10	--	0	158	1.0 .25	11 .02	--	.00	--	--	164	101	0	1.0	X
80 6399.50 DEADMAN CREEK AT BAXTER ROAD																						
02/05/75 0705	5050 5050	4.50 88	48F 9C	7.2 7.2	70	7.2 .36	3.6 .30	10 .57	--	0	44	12 .72	2.8 .25	--	.20	--	--	108	57	0	0.0	T
03/12/75 0800	5050 5050	9.1 11	52.0F 84	7.5 11.0C	126	11 .55	7.9 .65	16 .70	--	0	67	9.5 1.43	5.4 .20	--	.10	--	--	121	60	0	0.9	T
04/16/75 0815	5050 5050	3.08 40	9.0F 12.5C	8.3 8.0	212	15 .75	9.8 .61	20 .57	--	0	122	8.2 .00	7.7 .17	--	.00	--	--	132	78	0	1.0	X
80 7040.00 SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE																						
12/19/74 1545	5050 5050	17.49 88	53.0F 12.0C	7.2 8.1	400	29 1.45	16 1.39	82 3.37	--	0	115	82 1.09	95 1.17	4.8 2.71	.40 .08	--	--	389	142	0	0.0	X
04/03/75 1100	5050 5050	18.71 86	55.4F 13.0C	7.9 8.0	490	30 1.50	14 1.20	68 2.96	--	0	96	81 1.61	77 1.69	4.0 2.17	.40 .08	--	--	338	135	55	2.5	
05/20/75 1330	5050 5050	17.53 106	57.2F 24.0C	7.9 8.1	500	27 1.35	15 1.23	61 2.65	--	0	104	50 1.70	80 1.21	8.0 2.26	.40 .22	--	--	342	130	44	2.3	

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER L#8	G.W. D	OO DEPTH	TEMP PH EC	FIELD LABORATORY	MINERAL CONSTITUENTS IN CA MG NA K CO3 HCO3 SO4 CL NO3	MILLIGRAMS PER LITER			MILLIGRAMS PER LITER													
							MILLIEQUIVALENTS PER LITER			PERCENT REACTANCE VALUE													
H0 7040.00 SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE																							
CONTINUED																							
06/25/75 0850	S500 S501					-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	15.2									
07/23/75 0825	S500 S501	6.1 7.3	77 25	F C	7.9 7.9	931	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	18.4	746F								
08/27/75 1400	S500 S500	15.01 15.01	7.1 8.4	75.2F 24.0C	7.5 7.5	800 774	42 2.10	18 1.48	88 3.83	-- -- -- -- --	0 .00 2.52	154 34	77 1.60	119 3.36	.30	-- 457							
							20	52				34	2.45	-- 420	181 53	2.9							
H0 7080.00 SAN JOAQUIN RIVER NEAR GRAYSON																							
12/19/74 1240	S500 S500	9.5 8.6	51.8F 11.0C	7.4 R2	800 1100	44 2.20	27 2.42	141 6.13	-- -- -- -- --	0 .00 2.72	166 3.31	159 4.23	150 .12	.80	-- 647								
							21	56				32	1.1	-- 611	221 85	4.1							
04/03/75 1250	S500 S500	9.4 8.9	55.4F 13.0C	7.7 8.0	550 682	33 1.65	17 1.41	78 3.39	-- -- -- -- --	0 .00 1.79	109 2.19	105 2.40	85 3.36	.50	-- 394								
05/28/75 1430	S500 S500	10.7 12.4	73.4F 23.0C	A.2 A.1	550 600	27 1.35	16 1.32	67 2.91	-- -- -- -- --	0 .00 1.74	106 1.48	71 2.31	82 2.42	.20	-- 348								
						24	52	22	53		31	2.7		-- 315	134 47	2.5							
06/25/75 0845	S500 S501	8.0 8.6	66 19	F C	7.9 7.9	526	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	0 .00 1.84	112	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	34C								
07/23/75 0905	S500 S501	6.8 8.0	75 24	F C	7.7 7.7	928	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	0 .00 2.92	178	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	60AF								
08/27/75 1300	S500 S500	6.7 7.9	75.2E 24.0C	7.6 7.4	800 804	40 2.00	21 1.73	90 3.92	-- -- -- -- --	0 .00 2.66	162 1.83	88 3.13	111 2.41	.30	-- 465								
						26	23	51			35	24		-- 430	188 54	2.9							
H0 7200.00 SAN JOAQUIN RIVER AT PATTERSON BRIDGE																							
06/24/75 1230	S500 S501	8.6 9.4	58 26	F C	7.9 C	494	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	13.4	26C							
07/22/75 1220	S500 S501	8.9 11.3	82 28	F C	8.1 8.1	756	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	0 .00 2.16	132	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	16.8	54AF							
															-- 5								
H0 7250.00 SAN JOAQUIN RIVER AT CHOW'S LANDING BRIDGE																							
06/24/75 1140	S500 S501	8.1 8.9	68 20	F C	7.9 C	464	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	13.0	29C							
07/22/75 1140	S500 S501	8.7 11.0	82 28	F C	8.1 R.1	706	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	0 .00 2.03	124	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	16.4	50AF							
															-- 5								
H0 7375.00 SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE																							
✓ 12/19/74 1240	S500 S500	55.69 94	10.6 10.0C	50.0F R.0C	7.6 8.2	1450 2.60	87 4.39	53 11.92	274 1.92	-- -- -- -- --	0 .00 4.00	264 6.00	329 6.95	338 9.53	.10	-- 1270							
✓ 04/03/75 0830	S500 S500	57.87 83	8.8 13.0C	55.4F A.1	7.5 1330	1002 3.34	67 2.65	32 6.96	160 2.00	-- -- -- -- --	0 .00 2.66	162 4.71	226 5.87	208 3.36	.10	-- 828							
✓ 05/21/75 1314	S500 S500	68.0K 22.0C	8.0n A.1	50.0F 1.00	900 1000	60 2.49	15 1.39	133 5.00	274 1.70	-- -- -- -- --	0 .00 2.51	150 2.05	179 5.05	6.5 .10	.30	-- 630							
✓ 05/28/75 1100	S500 S500	56.26 23.0C	10.3 8.0	73.4F 1.00	1000 1000	48 2.40	28 2.30	126 5.57	128 2.22	-- -- -- -- --	0 .00 2.47	151 2.75	132 4.96	176 2.77	.40	-- 635							
✓ 06/24/75 1034	S500 S501	7.6 8.5	7.0 21	F C	8.0 C	1145	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	15.4	35C							
✓ 07/22/75 1034	S500 S501	7.3 8.9	7.9 26	F C	7.9 7.9	813	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	0 .00 2.16	132	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	17.8	38AF							
✓ 08/20/75 1130	S500 S500	75 24	F C	7.4 7.7	1000 1030	55 2.74	22 1.81	120 5.22	56.6 1.16	-- -- -- -- --	0 .00 2.09	152 2.49	131 2.55	161 4.27	.20	-- 629							
08/27/75 1000	S500 S500	57.11 86	7.4 23.0C	73.4F 8.0	7.6 937	900 2.30	46 1.80	23 4.07	112 2.28	-- -- -- -- --	0 .00 2.64	161 2.54	122 3.98	141 2.43	.50	-- 569							
						25	53	22	54		24	27	4.9		-- 587	211 78	3.4						
H0 7710.00 SAN JOAQUIN RIVER NEAR MENDOTA																							
12/11/74 1040	S500 S500	11.5 10	48.2F 4.0C	8.3 B.0	300 470	24 1.20	12 1.00	50 2.18	274 1.72	-- -- -- -- --	0 .00 1.39	165 1.58	50 1.03	2.0 +.03	.20	-- 266							
04/08/75 1000	S500 S500	3.06 105	10.9 13.5C	56.3F 7.9	320 429	24 1.20	12 1.00	42 1.83	42 1.45	-- -- -- -- --	0 .00 1.39	165 1.34	51 1.01	51 1.35	.20	-- 261							
05/28/75 0830	S500 S500	3.72 102	9.0 21.6C	71.0F 8.0	382 393	24 3.15	23 1.71	86 1.65	38 1.47	-- -- -- -- --	0 .00 1.26	165 1.26	39 1.23	S1 1.44	.10	-- 193							
09/11/75 1000	S500 S500	3.46 85	7.3 23.0C	73.4F 8.0	7.6 411	21 1.05	12 1.05	40 1.74	40 1.46	-- -- -- -- --	0 .00 1.61	161 1.62	43 1.33	67 1.35	.20	-- 232							
						28	53	26	46		42	23	4.6		-- 211	104 22	1.7						

TABLE D-2 (Cont'd)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. Q	DO DEPTM	TEMP PN	FIELD LABORATORY PN EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER				MILLIGRAMS PER LITER							
							CA	MG	NA	K	CO ₃	HCO ₃	SO ₄	CL	TOC	TH		
HO 7885.00 SAN JOAQUIN RIVER AT FRIANT DAM																		
12/10/74 1400	5050 5050	1.84 91	10.3 9.5C	49.1F 7.1	6.8 53	4.2 .21 .21 .22	1.3 1.1 1.1 37	4.6 1.9 1.9 37	-- -- -- --	0 0.00 0.00 0.00	20 65 14 16	3.3 .33 1.0 1.0	3.0 .07 .02 .02	2.0 .03 .12 .12	.00 -- -- --	-- 28 0 0	16 0 0.5 T	
04/02/75 0720	5050 5050	2.07 89	10.0 10.0C	50.0F 7.3	7.0 80	52 .33 .15 .19	6.7 1.8 1.8 40	1.8 7.4 7.4 40	-- -- -- --	0 0.00 0.00 0.00	34 56 56 77	3.8 .04 .04 .18	4.5 1.3 1.3 1.8	-- -- -- --	.10 39 0 39	24 0 0 T		
05/27/75 1000	5050 5050	2.47 111	12.0 11.7C	53.0F 7.2	7.5 51	3.9 .19 .09 .39	1.1 1.1 1.1 1.8	4.8 1.9 1.9 43	-- -- -- --	0 0.00 0.00 0.00	20 70 4 4	1.0 .33 .02 .02	4.2 .12 .12 .26	-- -- -- --	.00 -- -- --	35 25 0 25	14 0 0.6 T	
09/16/75 0700	5050 5050	2.16 59	6.4 11.5C	52.7F 7.6	6.8 45	3.9 .19 .05 .48	6.6 3.6 3.6 13	3.6 3.6 3.6 40	-- -- -- --	0 0.00 0.00 0.00	16 70 14 14	2.5 .26 .05 .06	2.0 1.0 1.0 1.0	-- -- -- --	.00 -- -- --	36 20 0 20	12 0 0.4 T	
HO 7886.50 SAN JOAQUIN RIVER AT NORTH FORK ROAD BRIDGE																		
10/08/74 0915	5050 5050	11.0 97	9.5C	49.1F 7.5	6.8 43	3.7 .18 .06 .13	7 1.0 1.0 1.0	3.0 1.0 1.0 1.0	-- -- -- --	0 0.00 0.00 0.00	18 97 97 97	2.2 .30 .00 .01	2.5 3 3 3	-- -- -- --	.00 -- -- --	* 40 17 0 17	12 0 0.4 T	
07/09/75 0700	5050 5050	9.3 86	11.5C	52.7F 6.8	6.8 36	30 --	-- --	-- --	-- --	0 0.00	14 .23	-- --	-- --	-- --	-- --	30	E S	
V3 1158.10 STANISLAUS RIVER BELOW TULLOCK DAM																		
12/20/74 0930	5050 5050	12.92 11.1	11.0 10.5C	50.9F 7.8	7.4 70	55 .43 .15 .11	8.7 1.8 2.5 16	1.8 1.8 2.5 16	-- -- -- --	0 0.00 0.00 0.00	34 89 10 10	3.1 .56 .06 .00	1.0 1.0 1.0 1.0	-- -- -- --	.00 -- -- --	44 34 1 0.2	29 1 0 T	
04/04/75 0700	5050 5050	11.6 101	9.0C	48.2F 7.6	7.3 94	6.6 .42 .36 .16	8.4 4.6 3.5 16	4.6 3.6 3.5 16	-- -- -- --	0 0.00 0.00 0.00	47 83 14 14	6.4 .13 .03 .03	1.0 1.0 1.0 1.0	-- -- -- --	.10 47 1 0.2	52 47 1 0.2		
05/29/75 0830	5050 5050	11.0 105	13.0C	55.4F 7.0	8.4 37	29 1.30 .17 .09	2.1 1.0 1.0 1.0	2.0 1.0 1.0 1.0	-- -- -- --	0 0.00 0.00 0.00	20 87 5 8	1.2 .33 .02 .03	1.0 1.0 1.0 1.0	-- -- -- --	.00 -- -- --	27 42 15 57	E T 0.1	
09/17/75 1630	5050 5050	15.90 126	10.4 25.0C	77.0F 7.7	7.9 96	9.0 .43 .35 .17	8.6 4.0 4.0 18	4.2 4.0 4.0 18	-- -- -- --	0 0.00 0.00 0.00	48 79 75 19	9.4 .20 .06 .06	2.0 1.0 1.0 1.0	-- -- -- --	.00 -- -- --	64 52 39 0	39 0 0.3	
B3 1400.50 STANISLAUS RIVER AT PARROTS FERRY BRIDGE																		
05/29/75 0800	5050 5050	11.2 104	51.8F	51.8F 7.6	8.4 34	4.1 .20 .06 .08	7 1.0 1.0 1.0	1.8 1.8 1.8 1.0	-- -- -- --	0 0.00 0.00 0.00	16 72 19 19	3.3 .26 .07 .03	1.0 1.0 1.0 1.0	-- -- -- --	.00 -- -- --	53 19 13 0	13 0 0.2 T	
06/18/75 1130	5050 5050	10.0 97	13.0C	55.4F 7.4	8.3 30	25 1.30 .17 .09	-- -- -- --	-- -- -- --	-- -- -- --	0 0.00 0.00 0.00	16 72 19 19	-- -- -- --	-- -- -- --	-- -- -- --	30	E S		
09/17/75 1230	5050 5050	9.4 98	61.7F	51.8F 7.7	7.3 41	35 .28 .04 .08	5.6 1.8 1.8 20	5.6 1.8 1.8 20	-- -- -- --	0 0.00 0.00 0.00	23 38 84 12	2.5 .05 .00 .00	1.0 1.0 1.0 1.0	-- -- -- --	.00 -- -- --	31 22 16 0	16 0 0.2 T	
B3 2110.10 STANISLAUS RIVER NF AT CALAVERAS BIG TREES STATE PAR																		
06/18/75 1330	5050 5050	9.9 93	53.6F	53.6F 7.0	6.8 20	-- --	-- --	-- --	-- --	0 0.00	16 16	3.3 .26 .07 .03	1.0 1.0 1.0 1.0	-- -- -- --	-- -- -- --	24	E S	
09/17/75 1400	5050 5050	8.2 90	66.2F	66.2F 7.7	7.2 31	28 --	-- --	-- --	-- --	0 0.00	17 .28	-- --	-- --	-- --	-- --	24	E S	
B3 3255.00 STANISLAUS RIVER MIDDLE FORK AT REARDSLEY																		
06/18/75 0900	5050 5050	9.9 98	49.6F	49.6F 7.4	8.3 34	-- --	-- --	-- --	-- --	0 0.00	18 18	3.1 .30	1.0 --	-- --	-- --	34	E S	
09/17/75 0930	5050 5050	8.6 98	60.8F	60.8F 7.6	7.2 46	35 45	-- --	-- --	-- --	0 0.00	24 39	-- --	-- --	-- --	-- --	33	E S	
R3 3480.10 STANISLAUS RIVER MIDDLE FORK AT DARONELLE																		
06/18/75 0930	5050 5J50	9.9 95	40.8F	40.8F 7.5	6.1 32	-- --	-- --	-- --	-- --	0 0.00	20 .33	-- --	-- --	-- --	-- --	33	E S	
09/17/75 0800	5050 5050	8.3 100	58.1F	58.1F 14.5C	7.0 7.7	29 29	-- --	-- --	-- --	0 0.00	16 .26	-- --	-- --	-- --	-- --	20	E S	
B4 1265.50 TUOLUMNE RIVER ABOVE DON PEDRO RESERVOIR																		
12/20/74 1100	5050 5050	11.6 107	48.2F	48.2F 9.0C	6.8 6.9	20 20	2.2 .11	8 .03	1.2 .05	-- --	0 0.00	10 80	1.3 .03	1.2 .01	1.1 .00	-- --	16 10 7 0	7 0 0.2
B4 1290.10 TUOLUMNE RIVER AT KARO'S FERRY BRIDGE																		
05/29/75 0915	5050 5050	10.9 104	53.6F	53.6F 12.0C	7.2 7.2	20 20	1.4 .07	6 .07	1.4 .06	-- --	0 0.00	10 80	1.0 .04	1.4 .04	-- --	.00 --	21 10 7 0	7 0 0.2
06/04/75 1100	5050 5050	11.0 51	11.7F	11.7F 11.3C	6.8 6.8	12 15	-- --	-- --	-- --	0 0.00	6 .10	-- --	-- --	-- --	-- --	18	E S	
09/24/75 1230	5050 5050	8.1 103	80.6F	80.6F 27.0C	7.4 8.2	50 49	4.7 .23	1.8 .15	1.9 .08	-- --	0 0.00	23 84	3.3 .07	1.0 .00	-- --	.00 --	30 23 19 0	19 0 0.2 T

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. O DEPTH	DO SET	TEMP PM EC	FIELD LABORATORY	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃ SO ₄ CL NO ₃	MILLIGRAMS PER LITER			MILLIGRAMS PER LITER			REM
							CONCENTRATION IN MILLIEQUIVALENTS PER LITER	ALKALINITY P.M. VALUE	B	F	TDS CL NO ₃	SUM NCH	
B4 1680.00 TUOLUME RIVER ABOVE EARLY INTAKE													
06/04/75 0900	5050 5050	10.6 101	49.6F 9.8C	6.8 6.5	10 11	-- -- -- --	0 .00	.05	-- -- --	-- --	--	15	E
09/24/75 0930	5050 5050	9.6 100	56.8F 13.8C	6.8 8.1	9 10	-- -- -- --	0 .00	.08	-- -- --	-- --	--	6	S
B4 1850.10 TUOLUME RIVER AT TUOLUME MEADOWS													
06/04/75 0630	5050 5050	9.5 95	35.8F 2.1C	6.8 6.7	4 10	-- -- -- --	0 .00	.03	-- -- --	-- --	--	13	EX
09/24/75 0700	5050 5050	7.9 93	46.9F 8.3C	7.0 7.8	18 30	-- -- -- --	0 .00	.15	-- -- --	-- --	--	17	X
B5 R 735.7 016+2.1 LAKE MCCLURE NEAR MCCLURE POINT													
07/10/75 0900	5050 5050	10.7 53	6.3 53	5.2 .28	1.9 1.8	1.9 .02	.7 .00	0 .39	24 .39	2.6 .05	.5 .01	.00	--
									87	11	2	33	21
												25	2
												0 .2	T
B5 R 736.7 007+9.1 LAKE MCCLURE AT BABY													
09/03/75 1100	5050 5050	8.7 53	7.0 7.3	4.8 4.8	1.1 .09	2.3 .10	.6 .02	0 .00	20 .33	1.8 .04	1.0 .03	.00	--
									83	10	8	38	21
												17	0
												0 .2	T
B5 1200.00 MERCEO RIVER BELOW EXCHEQUER DAM													
12/20/74 1330	5050 5050	9.7 92	54.5F 12.5C	6.8 7.1	35 42	4.2 .21	1.8 .15	1.8 .08	-- 0	18 .30	2.6 .05	1.0 .03	.00
									77	8	3	30	21
												18	3
												0 .2	T
B4 119.00 MERCEO RIVER AT BABY													
04/04/75 1010	5050 5050	11.9 105	49.1F 9.5C	7.6 7.5	45 60	6.3 .31	1.8 .15	2.3 .10	-- 0	27 .44	3.3 .07	1.8 .02	.00
									83	13	4	36	23
												1	0 .2
												0 .3	T
B5 1200.00 MERCEO RIVER AT BABY													
05/29/75 0930	5050 5050	9.3 87	53.6F 12.0C	7.2 7.1	35 52	4.5 .22	2.2 .18	2.6 .11	-- 0	24 .39	3.1 .07	1.4 --	.00
									78	14	8	45	20
												1	0 .3
												0 .3	T
B5 1320.00 MERCEO RIVER AT BABY													
11/13/74 1530	5050 5050	11.2 129	70.7F 21.5C	7.1 7.6	63 97	10 .59	1.7 .14	4.4 .19	-- 0	38 .0	3.7 .00	1.0 .10	.00
									56	8	14	55	32
												1	0 .3
												0 .2	T
B5 1410.10 MERCEO RIVER ABOVE BRICEBURG													
11/13/74 1330	5050 5050	12.0 111	50.0F 19.0C	7.3 7.7	40 68	6.8 .34	1.2 .10	4.0 .17	-- 0	27 .44	5.6 .11	3.4 .01	.00
									68	17	15	44	22
												0 .4	T
B5 1517.10 MERCEO RIVER BELOW EL PORTAL													
11/13/74 1130	5050 5050	11.1 101	47.5F 8.6C	7.3 7.4	37 50	4.9 .28	4.6 .03	3.2 .14	-- 0	20 .00	2.0 .00	1.6 .05	.00
									87	13		36	14
												0	0 .4
												0 .4	T
B5 1519.50 MERCEO RIVER AT JUNCTION BIG OAK FLAT RD AND HWY 140													
11/13/74 0930	5050 5050	8.1 76	45.0F 7.2C	6.8 6.9	30 42	3.5 .17	2.8 .07	2.8 .12	-- 0	14 .00	2.5 .00	1.6 .07	.00
									77	23		31	12
												1	0 .4
												0 .4	T
B5 1700.00 MERCEO RIVER AT HAPPY ISLES BRIDGE NEAR YOSEMITE													
11/13/74 0715	5050 5050	1.37 101	40.6F 4.8C	7.0 7.1	23 36	3.0 .03	2.4 .10	2.8 .10	-- 0	9 .00	3.3 .00	2.6 .09	.00
									63	38		29	9
												2	0 .3
												0 .4	T
B5 5152+10 REAR CREEK ABOVE BEAR CREEK RESERVOIR													
02/05/75 1445	5050 300E	10.8 96	49.1F 9.5C	7.5 7.5	75 105	8.0 .55	5.6 .46	5.1 .32	-- 0	51 .00	10 .21	.8 .02	.00
									79	20	2	96	43
												1	0 .3
												0 .4	T
B5 6152+10 BURNS CREEK AT MERCEO MARIPOSA COUNTY LINE													
02/05/75 1625	5050 5050	10.2 96	52.7F 11.5C	7.5 6.1	105 198	8.0 .75	5.6 .62	5.1 .37	-- 0	51 .00	10 .21	.8 .02	.00
									79	20	2	96	43
												2	0 .5
												0 .4	T
B5 10.5 51+3F 7.4 156 16 12 0 112 15 6.1 -- 10 -- 143 93 2 0.5 X													
03/12/75 0930	5050 35	10.5 96	51+3F 10.7C	7.4 7.27	156 .80	16 1.07	13 .52	12 .00	-- 0	112 .05	15 .31	.1 .06	.00
									79	13	7	117	93
												2	0 .5
												0 .4	T
B5 10.3 53.6F 8.0 205 21 16 14 -- 0 144 19 6.8 -- .00 -- 148 118 1 0.6 X													
04/16/75 0915	5050 80	10.3 96	53.6F 12.0C	8.0 8.0	205 283	21 1.05	16 1.32	14 .81	-- 0	144 .00	19 .14	.0 .09	.00
									80	14	6	148	118
												1	0 .6

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G+H O DEPTH	DD SAT	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN PPM EQUIVALENT PER LITER	MILLIGRAMS PER LITER										REH		
							CA	MG	NA	K	CD3	CD3	SD+	CL	NOD3	SUM	TDS		
B6 2020.10 OWENS CREEK ABOVE OWENS RESERVOIR																			
02/05/75 125n	5050 5050	10.8 75E	50 F 97	7.8 10 C	115 7.8	14 .70	8.0 .66	8.2 .36	-- .00	0 1.38	.84 .19	.9 .08	2.7 .12	-- 5	.20 6	-- 83	140 0	E T	
03/12/75 0920	5050 5050	11.0 12	52 F 101	8.2 11 C	210 8.1	26 304	17 1.30	15 1.40	-- .00	171 2.80	9.2 .19	8.2 .23	-- 6	.10 7	-- 160	180 160	134 0	A T	
04/16/75 1245	5050 5050	11.3 113	59.0F 15.0C	8.4 8.2	249 326	30 1.50	17 1.40	16 .70	-- .00	186 3.05	7.9 .16	9.3 .26	-- 5	.00 5	-- 172	197 172	144 0	A T	
B6 2204.10 MARIPOSA CREEK ABOVE MARIPOSA RESERVOIR																			
02/05/75 1040	5050 5050	11.1 200E	47.3F 8.5C	7.4	60 104	8.3 .41	7.0 .65	5.0 .22	-- .00	0 1.38	51 .16	7.7 .03	1.2 1.03	-- 3	.10 5	-- 55	89 55	53 11	E T
03/12/75 1100	5050 5050	11.3 121	54.0F 12.2C	8.2	121 168	11 .55	10 .82	8.6 .37	-- .00	0 1.43	87 .18	8.7 .10	3.5 1.11	-- 6	.10 7	-- 85	100 85	69 0	A T
04/16/75 1200	5050 5050	10.9 102	53.6F 12.0C	8.2	135 184	15 .75	9.8 .81	8.6 .37	-- .00	0 1.42	99 .13	6.1 .10	3.6 7	-- 5	.00 5	-- 114	114 92	78 0	A T
B6 4200.00 CHOWMILLA RIVER NR RAYMOND																			
12/11/74 1340	5050 5050	68.70 101	49.1F 9.5C	7.4	230 353	28 1.40	6.1 .50	28 1.22	-- .00	0 1.44	86 .11	5.4 .15	56 4	+.2 50	.10 5	-- 167	222 55	95 11	X T
04/02/75 1020	5050 5050	11.2 10.5C	50.9F 7.8	7.5	92 133	12 60	3.4 .28	13 .48	-- .00	0 1.43	65 .09	4.4 .19	6.6 11	-- 7	.00 7	-- 69	95 69	44 0	E T
05/28/75 1445	5050 5050	2.03 101	78.8F 26.0C	7.8	165 157	16 .80	1.4 .12	13 .57	-- .00	0 1.45	70 .00	7.0 .37	1.3 76	-- 24	.00 7	-- 78	119 78	46 0	E T
09/16/75 0800	5050 5050	7.6 86	69.8F 21.0C	7.3	370 468	36 1.80	7.3 .60	42 1.83	-- .00	0 1.42	99 .04	2.0 .25	89 1	-- 60	.00 1	-- 283	283 225	120 39	A T
B6 7150.00 FRESNO RIVER NR DAULTON																			
12/11/74 1360	5050 5050	11.2 96	46.4F 8.0C	7.2	110 158	12 .60	2.7 .22	15 .65	-- .00	0 1.46	51 .16	4.3 .06	20 56	+.3 00	.10 5	-- 79	110 0	*1 1.0	X T
04/02/75 0930	5050 5050	11.2 103	51.8F 11.0C	7.6	85 123	11 .55	2.6 .21	11 .48	-- .00	0 1.43	57 .03	5.1 .11	6.5 .18	-- 76	.00 9	-- 64	80 64	38 0	A T
05/28/75 1410	5050 5050	6.4 108	71.6F 22.0C	8.2	65 78	6.5 21	4.3 .21	2.6 .24	-- .00	0 1.41	31 .05	3.1 .00	4.2 .12	-- 81	.00 19	-- 32	53 32	21 0	E T
B7 1180.00 SAN JOAQUIN RIVER BELOW KERCKHOFF NEAR PRATHER																			
10/10/74 1040	5050 5050	5.71 29	65.5F 18.6C	7.1	28 29	2.3 .11	.6 .07	3.0 .13	-- .00	0 2.01	51 .13	4.3 .02	20 1.02	+.3 .06	.10 7	-- 71	110 7	*1 0	X T
12/10/74 110n	5050 5050	10.9 97	49.1F 9.5C	7.1	25 36	2.7 .13	.8 .07	3.0 .13	-- .00	0 2.01	13 .04	2.1 .07	2.4 .02	1.3 .02	.10 6	-- 21	35 6	10 0	E T
05/27/75 1110	5050 5050	11.7 11.1C	52.0F 7.1	7.2	33 20	.9 4.0	1.0 4.0	1.8 4.0	-- .00	0 1.55	9 .00	2.8 .08	-- 65	.00 35	-- 7	-- 23	23 11	6 0	O.3 T
09/16/75 1400	5050 5050	8.7 92	63.0F 17.2C	6.7	23 59	2.6 .13	.1 .01	1.9 .08	-- .00	0 1.56	10 .01	2.1 .04	0.0 .00	-- 80	.00 20	-- 12	20 7	7 0	O.3 T
B7 1188.00 KERCKHOFF RESERVOIR NEAR AUBREY																			
10/10/74 0001	5050 5050	66.2F 19.0C	7.0	26 6.9	2.6 .13	.1 .04	3.0 .13	-- .00	0 2.01	13 .01	6.6 .02	8 4	+.8 8	-- 8	.00 0	-- 14	14 13	7 0	O.5
B7 1340.00 SAN JOAQUIN RIVER ABOVE WILLOW CREEK NEAR AUBREY																			
10/08/74 083n	5050 5050	8.6 97	49.5F 9.7C	6.8	22 7.2	1.8 .09	.6 .05	1.8 .08	-- .00	0 1.56	10 .00	0 .01	+.5 .06	-- 6	.00 0	-- 21	21 10	7 0	O.3 T
07/09/75 0930	5050 5050	10.0 97	54.5F 12.5C	6.8	15 18	-- 4.0	-- 4.0	-- 3.0	-- .00	0 1.56	6 1	6 3	-- 16	-- 6	-- 19	20 18	20 18	5 0	E T
B7 1406.00 MUSIC CREEK # 1 NEAR SHAYER LAKE																			
11/08/74 1400	5050 5050	0.44 +.3	44 F 7 C	7.0	46 46	3.4 .17	.9 .07	3.4 .15	-- .00	0 1.50	18 .01	5 .01	2.3 .06	+.1 6	.00 0	-- 42	14 19	12 0	O.4 T
05/19/75 1020	5050 5050	0.99 0.99	44 F 7.1	34	3.1 4.5	.8 .15	2.6 .07	-- .11	-- .00	0 2.08	17 .01	6 .01	2.4 .07	-- 3	.00 19	-- 30	14 18	11 0	O.3 T

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G+H Q	DEPTH	DD SAT	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN CA MG NA K PER MILLEQUIVALENTS PER LITER	MILLIGRAMS PER LITER PER MILLIEQUivalents PER LITER VALUE	MILLIGRAMS PER LITER													
									CO3	HCO3	SO4	CL	NH3-N	TOS	TH	TURB	REM					
H7 1406.00 MUSIC CREEK # 2 NEAR SHAYER LAKE																						
11/08/74 1500	5050 5050	1.06 +1	43 6	F C	56 7.3	56 55	4.6 +2.3 +2.3 44	1.3 +11 21	4.2 +18 35	-- -- --	0 +.00 +.00	.28 .92 8	.00 +.04 +.00	-- -- --	48 25 17	0 0 0+4	E T					
05/19/75 0920	5050 5050	1.42					34	3.1	.8	2.6	--	0	17	.6	2.5	--	.00	--	33 18	11 0	0+3	E T
H7 1532.50 SAN JOAQUIN RIVER BELOW SHAKELAT CREEK																						
10/08/74 1245	5050 5050	9.7 114	65.3F 18.5C	7.3 7.4	50 57	4.45 .22 4.5	.7 +.21 12	4.8 +.21 4.3	-- -- --	0 +.00 +.00	21 34 76	1.0 +.02 4	3.2 +.09 20	-- -- --	42 25 14	0 0 0+6	E T					
07/09/75 1230	5050 5050	10.7 106	55.4F 13.0C	8.1 7.1	15 16	-- --	-- --	-- --	0 +.00	7 11	-- --	-- --	-- --	-- --	--	--	16		E			
H7 1910.00 FRIANT KERN CANAL AT FRIANT																						
04/02/75 0800	5050 5050	12.0 107	44.6F 9.8C	7.2 7.1	39 45	3.6 .18 41	1.0 +.08 18	4.2 +.18 41	-- -- --	0 +.00 +.00	19 31 69	3.3 +.07 16	2.6 +.07 16	-- -- --	20 24 13	0 0 0+5	X					
05/27/75 1030	5050 5050	12.1 114	54.0F 12.2C	7.1 7.4	44 34	2.3 +.11 31	1.3 +.14 31	3.3 +.14	-- -- --	0 +.00 +.00	17 28 78	.0 +.08 22	2.8 +.08 22	-- -- --	44 18 11	0 0 0+4	E T					
09/16/75 1300	5050 5050	8.5 95	69 21	F C	7.4 7.6	2.6 +.13 5	.1 +.01 5	1.8 +.08 36	-- -- --	0 +.00 +.00	10 16 80	1.8 +.04 20	.0 +.00 --	-- -- --	20 11 7	0 0 0+3	E T					
H7 4250.50 SAN JOAQUIN RIVER SOUTH FORK AT MONO HOT SPRINGS																						
10/09/74 1200	5050 5050	9.4 101	47.3F 8.5C	6.9 7.0	20 27	2.4 +.11 48	.4 +.03 13	2.1 +.09 39	-- -- --	0 +.00 +.00	9 15 83	.6 +.01 6	.8 +.02 11	-- -- --	10 20 7	0 0 0+3	E T					
07/08/75 0940	5050 5050	7.4 10	62.5F 9.7	6.8 6.8	25 24	-- --	-- --	-- --	0 +.00	8 13	-- +.13	-- --	-- --	-- --	--	--	22		E			
BB 1253.10 GRISWOLD CREEK ABOVE PANACHE VALLEY																						
12/03/74 1030	5050 5050	300 8.3	284 7700	14.97 14.97	1380 23.36	1.9 .49	0 +.00	566 9.28	3980 82.06	236 6.66	2.3 .04	14.0 +.04	-- --	6530 6494	1920 1454	13.7	E C					
CO 1140.00 KINGS RIVER BELOW PEOPLES WEIR																						
12/16/74 1005	5050 5050	2.73 95	50.0F 10.0C	T.3 A.2	175 248	21 1.05	9.1 .75 .74	17 +.75 74	-- -- --	0 +.00 +.00	116 1.90 75	15 .31 12	7.9 +.22 10	-- -- --	150 133 90	0 0 0+8	X					
03/04/75 0930	5050 5050	3.88 102	52.7F 11.5C	7.0 7.3	38 51	4.8 +.24 12	1.4 +.15 15	3.5 +.14	-- -- --	0 +.00 +.00	22 3.6 73	3.1 +.06 12	2.5 +.07 14	-- -- --	35 26 18	0 0 0+4	T X					
05/27/75 0930	5050 5050	9.9 103	62.6F 17.0C	7.8 7.5	95 52	4.1 20	1.7 +.14	3.4 +.15	-- -- --	0 +.00 +.00	30 49 88	.0 +.07 13	2.4 +.07 13	-- -- --	57 26 17	0 0 0+4	E T					
09/03/75 1200	5050 5050	9.3 105	69.8F 21.0C	7.2 7.3	40 46	3.9 +.19	1.3 +.11	2.8 +.12	-- -- --	0 +.00 +.00	20 33 77	2.0 +.04 9	2.0 +.05 14	-- -- --	32 22 15	0 0 0+3	T					
CO 2185.00 KAWeah RIVER BELOW TEMINNUS DAM																						
12/16/74 1120	5050 5050	11.3 104	51.8F 11.0C	7.9 A.0	120 167	19 .95	4.5 .37 .44	10 +.23 44	-- -- --	0 +.00 +.00	79 1.29 78	9.1 .17 10	6.4 +.18 11	-- -- --	106 88 90	2 0 0+5	X					
03/04/75 1030	5050 5050	10.9 105	55.4F 13.0C	7.6 7.7	125 176	19 .95	4.2 .35 .48	4.2 +.25 48	-- -- --	0 +.00 +.00	83 1.36 77	8.2 .17 10	8.2 +.23 13	-- -- --	113 92 65	0 0 0+6	X					
05/28/75 0815	5050 5050	11.1 109	57.2F 14.0C	7.2 7.2	50 54	6.0 3.0	1.2 +.10	3.2 +.14	-- -- --	0 +.00 +.00	28 46 81	2.6 +.05 9	2.1 +.05 11	-- -- --	49 29 20	0 0 0+3	E T					
09/02/75 1200	5050 5050	8.5 107	76.8F 26.0C	7.3 7.4	75 79	8.3 +.41	2.3 +.19	4.2 +.18	-- -- --	0 +.00 +.00	38 62 79	2.3 +.05 6	4.0 +.11 14	-- -- --	50 40 30	0 0 0+3	T					
CO 2550.30 KAWeah RIVER AT LEMONCOVE																						
10/16/74 1430	5050 5050	9.8 111	7n.0F 21.1C	T.5 T.9	120 126	15 .75	2.8 +.23	6.9 +.30	-- -- --	0 +.00 +.00	79 1.03 84	4.1 +.09 7	3.4 +.10 8	-- -- --	72 63 49	0 0 0+4	X					
04/23/75 1400	5050 5050	11.2 110	57.0F 13.9C	7.4 7.7	112 108	-- --	-- --	-- --	0 +.00	56 .92	-- --	-- --	-- --	--	--	69		S				
08/06/75 1400	5050 5050	8.5 102	7n.3F 23.5C	7.1 7.0	50 51	-- --	-- --	-- --	0 +.00	25 +.41	-- --	-- --	-- --	--	--	--	38		E			
CO 3195.00 TULE RIVER AT NORTH BRIDGE NEAR PORTERVILLE																						
10/30/74 1500	5050 5050	7.8 8.9	64.4F 1n.0C	7.7 7.6	232 270	24 1.20	11 +.96	12 +.52	-- -- --	0 +.00 +.00	146 2.43 96	5.1 +.11 4	5.4 +.15 6	-- -- --	72 63 49	0 0 0+5	X					
04/09/75 1320	5050 5050	11.8 115	56.3F 13.5C	7.8 8.0	190 240	-- --	-- --	-- --	0 +.00	73 1.20	-- --	-- --	-- --	--	--	--	150		X			

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G+M O DEPTH	TEMP PM EC	FIELD LABORATORY	MINERAL CONSTITUENTS IN CA MG NA K CO3 HC03 SO4 CL NO3	MILLIGRAMS PER LITER			MILLIEQUIVALENTS PER LITER			PERCENT REACTANCE VALUE			MILLIGRAMS PER LITER				
						8	F	TOS	8	F	TOS	TM	TURB	REW	5102	SUM	NCH	SAR	
CO 3195.00 TULE RIVER AT NORTH BRIDGE NEAR PORTERVILLE																	CONTINUED		
08/20/75 0800	8.0	75.2F	7.0	145	--	--	--	--	0	93	--	--	--	--	--	--	97		
1430 5050	96	24.0C	7.6	168					.00	1.52								5	
09/02/75 0800	5.51	7.4	86.6F	7.2	200	20	5.6	9.8	--	0	165	1.2	5.9	--	.10	--	119	73	
1330 5050	94	27.0C	7.7	192	100	4.6	4.3	.00	1.72	.02	.17	.9	.1	.00	.00	94	0	0.5	
					53	24	23											T	
CO 3196.00 TULE RIVER BELOW SUCCESS DAM																			
12/16/74 1400	5050	C-37	7.7	59.9F	7.5	345	45	20	22	--	0	266	6.6	8.0	2.7	.10	--	256	198
	5050	78	15.5C	8.3	448	225	1.71	.96	.00	4.36	.14	.23	.04	.00	.00	.00	0	0.7	
					46	35	20				91	3	5	1					X
03/04/75 123n	5050	3.05	11.9	53.2F	8.0	196	32	7.5	17	--	0	153	7.9	10	--	.20	--	173	111
	5050	111	11.8C	7.9	279	1.60	.62	.74	.00	2.51	.16	.28	.5	.9	.00	.00	150	0	0.7
05/27/75 1900	5050	3.94	11.2	57.2F	7.4	170	24	5.4	12	--	0	118	5.1	5.2	--	.10	--	144	82
	5050	110	14.0C	7.9	214	1.20	.44	.52	.00	1.93	.11	.15	.08	.00	.00	.00	110	0	0.6
					56	20	24											T	
CO 5150.00 KEAN RIVER NR BAKERSFIELD																			
12/17/74 1010	5050	11.7	49.1F	8.3	105	11	3.0	.13	--	0	60	9.2	4.1	.9	.20	--	74	40	
	5050	104	9.5C	8.0	130	.55	.25	.57	.00	.98	.19	.12	.01	.00	.00	.00	71	0	0.9
					40	18	42				75	15	9	1					X
03/05/75 120n	5050	10.9	51.8F	7.4	140	11	2.9	.14	--	0	63	8.7	6.5	--	.20	--	83	40	
	5050	100	11.0C	7.7	142	.55	.24	.61	.00	1.03	.18	.18	.08	.00	.00	.00	74	0	1.0
					39	17	44				74	13	13						X
05/27/75 115n	5050	9.8	68.6F	8.0	115	8.7	3.5	.12	--	0	57	7.9	4.0	--	.10	--	78	36	
	5050	109	28.0C	7.7	124	.43	.29	.52	.00	1.03	.16	.11	.06	.00	.00	.00	64	0	0.9
09/03/75 0945	5050	8.6	71.1F	7.6	100	9.2	2.2	.98	--	0	50	3.1	4.6	--	.10	--	66	32	
	5050	97	22.0C	7.7	111	.46	.18	.43	.00	1.82	.06	.12	.02	.00	.00	.00	53	0	0.8
					43	17	40												
CO 5160.10 KEAN RIVER AT HART PARK																			
10/02/74 1300	5050	9.6	7.7	9.4	103	1.6	1.0	.10	--	0	48	6.2	3.2	--	.10	--	66	30	
	5050	7.1	4.7	.13	44	.45	.13	.42	.00	1.77	.13	.19	.08	.00	.00	.00	54	0	0.8
					41	18	41				78	13	9						X
03/05/75 1245	5050	11.1	52.7F	8.4	105	12	3.2	.14	--	0	65	10.7	5.7	--	.20	--	80	43	
	5050	103	11.5C	7.7	144	.60	.26	.61	.00	1.07	.37	.16	.07	.00	.00	.00	85	0	0.9
					41	18	41				67	23	10						X
07/23/75 140n	5050	8.3	73.4F	7.6	97	--	--	--	--	0	45	--	--	--	--	--	56		
	5050	98	23.0C	7.5	100				.00	.74									
CO 5180.10 KEAN RIVER AT RANCHERIA BRIDGE																			
10/02/74 1200	5050	9.3	7.7	9.1	103	1.6	1.0	.10	--	0	48	5.3	3.0	--	.10	--	55	30	
	5050	7.5	4.6	.15	44	.45	.13	.42	.00	1.79	.11	.08	.08	.00	.00	.00	53	0	0.8
					43	14	42				81	11	8						X
03/05/75 114n	5050	10.6	50.9F	7.5	100	12	2.7	.14	--	0	64	12	5.3	--	.20	--	82	41	
	5050	97	10.5C	7.5	143	.60	.22	.61	.00	1.05	.25	.15	.05	.00	.00	.00	78	0	1.0
					42	15	43				72	17	10						X
07/23/75 133n	5050	8.2	73.4F	7.5	93	--	--	--	--	0	46	--	--	--	--	--	60		
	5050	97	23.0C	7.5	97				.00	.72									
CL 1115.50 KINGS RIVER NEAR PIEDRA																			
10/23/74 154n	5050	9.3	61.7F	7.2	25	2.6	.6	1.2	--	0	11	1.0	.0	--	.00	--	22	9	
	5050	106	16.5C	7.4	27	.13	.05	.05	.00	.18	.02	.00	.00	.00	.00	.00	11	0	0.2
					57	22	22												
05/07/75 1110	5050	11.9	51.8F	8.4	30	--	--	--	--	0	19	--	--	--	--	--	28		
	5050	104	11.0C	7.4	42				.00	.31									
CL 1140.00 KINGS RIVER BELOW PINE FLAT RESERVOIR																			
12/10/74 0850	0.89	9.5	52.7F	7.2	25	2.7	.8	1.6	--	0	13	1.3	.2	.5	.00	--	21	13	
	5050	.89	11.5C	7.0	26	.13	.07	.07	.00	.21	.03	.01	.01	.00	.00	.00	13	0	0.2
					48	26	26				81	12	4	4					X
03/04/75 073n	5050	5.30	10.0	48.6F	7.0	25	3.0	1.1	2.6	--	0	16	2.1	1.0	--	.00	--	27	12
	5050	88	9.2C	7.0	37	.15	.09	.11	.00	.28	.04	.03	.03	.00	.00	.00	18	0	0.3
					43	26	33				79	12	9						X
05/28/75 1000	5050	6.87	11.8	54.5F	7.2	40	4.2	1.1	3.4	--	0	20	3.0	1.4	--	.00	--	43	15
	5050	113	12.5C	7.1	45	.42	.09	.15	.00	.33	.06	.04	.03	.00	.00	.00	23	0	0.4
					47	20	33				77	14	4	4					X
09/02/75 0700	5050	4.69	9.6	59.0F	8.4	15	1.5	.8	1.2	--	0	9	1.5	1.0	--	.00	--	19	7
	5050	97	15.0C	7.2	21	.57	.07	.05	.00	.15	.03	.03	.03	.00	.00	.00	10	0	0.2
					37	37	26				71	14	1*						X
CL 1320.00 BIG CHEER ABOVE PINE FLAT RESERVOIR																			
10/23/74 133n	5050	1.38	10.1	66.2F	7.9	130	12	2.7	11	--	0	57	5.9	12	--	.00	--	103	41
	5050	112	19.0C	7.7	148	.60	.22	.49	.00	.93	.12	.34	.24	.00	.00	.00	72	0	0.7
					46	17	37				67	9	24						X
05/07/75 123n	5050	2.86	10.3	55.4F	7.4	50	--	--	--	--	0	34	--	--	--	--	--	50	
	5050	101	13.0C	7.4	56				.00	.56									

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. Q DEPTH	DD SAT	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS	MILLIDRAAMS PER LITER						MILLIDRAAMS PER LITER							
							CA	Mg	Na	K	CO ₃	ACO ₃	SOD	CL	NO ₃	B	F	TDS	TH	TURB
C1 1460.00 KINGS RIVER BELOW NORTH FORK																				
10/23/74 1215	5050 5050	10.6 108	59.0F 15.0C	7.3 7.4	45 55	5.4 .27	.8 .07	3.4 .15	--	0 .00	.24 .39	.26 .05	.9 .03	--	.00 .11	--	43 6	17 0	0.4	E
05/07/75 134n	5050 5050	5.26 106	10.9 12.8C	7.2 7.3	30 40	--	--	--	--	0 .00	.18 .30	--	--	--	--	--	26			X
05/28/75 111n	5050 5050	11.6 111	55.4F 13.0C	8.3 7.1	20 18	1.1 .05	.8 .07	1.2 .05	--	0 .00	.7 .11	.0 .00	1.4 .27	--	.00 .04	--	22 8	6 1	0.2	E
09/02/75 090n	5050 5050	9.1 101	86.2F 19.0C	7.5 7.5	35 47	4.6 .23	1.8 .15	3.2 .15	--	0 .00	.20 .23	.3 .07	1.0 .03	--	.00 .07	--	34 24	19 3	0.3	EX T
C1 4115.30 KINGS RIVER SOUTH FORK AT CEDAR GROVE																				
10/23/74 083n	5050 5050	10.1 98	44.6F 7.1C	7.3 7.4	34 50	4.6 .23	.4 .03	3.4 .15	--	0 .00	.15 .25	5.3 .11	1.6 .05	--	.00 .27	--	39 23	13 1	0.4	EX T
05/07/75 073n	5050 5050	11.6 70	41.0F 5.0C	7.6 7.4	22 35	--	--	--	--	0 .00	1.0 .16	--	--	--	--	--	18			X
C2 1210.30 KAWeah RIVER ABOVE LAKE KAWeah																				
10/16/74 1245	5050 5050	9.6 107	68.0F 20.0C	7.6 8.0	125 139	17 .85	2.1 .17	8.3 .36	--	0 .00	1.68 1.11	4.5 .09	5.7 .16	--	.00 .07	--	86 71	51 0	0.5	
04/23/75 1300	5050 5050	10.6 103	57.0F 13.9C	7.5 7.6	82 82	--	--	--	--	0 .00	4.2 .69	--	--	--	--	--	55			S
08/06/75 1300	5050 5050	8.0 99	77.9F 25.5C	7.8 7.5	80 84	--	--	--	--	0 .00	4.3 .70	--	--	--	--	--	58			S
C2 1250.00 KAWeah RIVER AT THREE RIVERS																				
12/16/74 123n	5050 5050	12.0 107	45.5F 7.5C	7.4 7.5	65 111	12 .60	2.0 .16	4.8 .21	--	0 .00	.51 .84	3.3 .07	2.4 .07	--	.00 .00	--	66 50	38 0	0.3	T
05/28/75 074n	5050 5050	10.6 103	55.4F 13.0C	7.3 7.3	35 35	4.3 .21	.8 .07	1.9 .08	--	0 .00	1.9 .66	1.9 .00	1.9 .05	--	--	--	35 18	14 0	0.2	E
09/02/75 1230	5050 5050	8.8 103	71.6F 22.0C	7.5 7.9	95 107	12 .60	2.2 .18	5.8 .25	--	0 .00	52 .85	2.5 .05	5.9 .17	--	.00 .05	--	69 54	39 0	0.4	T
C2 2010.30 KAWeah RIVER NORTH FORK NEAR MOUTH																				
10/16/74 093n	5050 5050	7.5 2.0	80.3F 19.7C	7.6 8.0	158 172	24 1.20	4.1 .34	7.9 .38	--	0 .00	1.62 1.67	3.7 .02	2.5 .07	--	.00 .04	--	114 92	77 0	0.4	
04/23/75 1015	5050 5050	10.8 102	53.0F 11.7C	7.4 7.7	84 92	--	--	--	--	0 .00	50 .42	--	--	--	--	--	64			S
08/06/75 093n	5050 5050	8.1 98	75.2F 24.0C	7.6 7.5	118 125	--	--	--	--	0 .00	74 1.21	--	--	--	--	--	89			E
C2 3147.00 KAWeah RIVER MF BELOW NO 2 INTAKE NR THREE RIVERS																				
10/16/74 082n	5050 5050	9.2 95	59.0F 15.0C	7.6 7.7	82 98	11 .55	2.3 .19	6.8 .30	--	0 .00	50 .82	2.9 .05	3.1 .09	--	.00 .06	--	56 51	37 0	0.5	
04/23/75 090n	5050 5050	12.0 107	47.0F 8.3C	7.4 7.3	54 54	--	--	--	--	0 .00	28 .46	--	--	--	--	--	32			S
08/06/75 083n	5050 5050	8.1 95	70.7F 21.5C	7.2 7.2	52 62	--	--	--	--	0 .00	31 .51	--	--	--	--	--	45			E
C2 4201.50 KAWeah RIVER SOUTH FORK ABOVE GROUSE CREEK																				
10/16/74 1115	5050 5050	9.0 2.0	64.9F 18.3C	7.7 7.9	140 157	21 1.05	3.3 .27	8.3 .36	--	0 .00	90 1.80	4.1 .09	3.9 .11	--	.00 .05	--	100 85	66 0	0.4	
04/23/75 115n	5050 5050	11.0 104	56.0F 14.0C	7.5 7.7	98 93	--	--	--	--	0 .00	51 .04	--	--	--	--	--	63			S
08/06/75 113n	5050 5050	8.2 99	71.6F 22.0C	8.0 7.6	110 124	--	--	--	--	0 .00	67 1.10	--	--	--	--	--	80			S

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	O.M. 0 DEPTH	TEMP 0 SAT	FIELD LABORATORY PM EC	MINERAL CONSTITUENTS IN CA MO NA K CO3 HC03 SO4 CL NO3	MILLIGRAMS PER LITER PERCENT EQUIVALENTS PER LITER REACTANCE VALUE	MILLIGRAMS PER LITER											
							8	F	TDS	SUM	NCH	TH	TURB	REN				
C3 1929.30 TULE RIVER BELOW SPRINGVILLE																		
10/30/74 11:40	5050 5050	12.1 11.9	57.0F 13.9C	8.3 8.1	275 377	12 .68	27 2.28	19 .83	-- --	0 .00	199 3.26	7.2 .15	12 .34	-- --	.10 --	204 176	144 0	0.7 x
12/16/74 14:40	5050 5050	3.75 10.7	51.6F 11.0C	8.1 8.3	255 346	44 2.20	7.8 .64	19 .83	-- --	0 .00	198 3.25	6.4 .13	9.6 .27	-- --	.10 --	214 184	142 0	0.7 x
04/09/75 11:00	5050 5050	11.2 10.2	50.4F 16.2C	8.2 8.1	130 188	-- --	-- --	-- --	-- 0.00	0 1.72	105 1.72	-- --	-- --	-- --	-- --	133		Ex
05/27/75 15:30	5050 5050	5.02 10.5	59.4F 18.0C	8.0 7.8	78 61	11 .55	1.8 .15	4.6 .83	-- --	0 .00	69 91	.0 .00	2.8 .08	-- --	.00 --	65 44	35 0	0.3 x
08/20/75 12:00	5050 5050	3.44 11.2	76.1F 24.5C	8.0 8.2	300 336	-- --	-- --	-- 0.00	-- 3.26	0 3.26	199 91	-- --	-- --	-- --	-- --	194		s
09/02/75 14:30	5050 5050	3.34 11.4	9.0F 27.0C	8.1 8.4	310 340	40 2.00	9.0 .74	20 .87	-- --	1.0 .03	201 3.29	4.6 .10	11 .31	-- --	.10 --	211 185	137 0	0.7 s
C3 2190.10 TULE RIVER NORTH FORK AT BEAR CREEK ROAD																		
10/30/74 0945	5050 5050	10.0 9.7	53.6F 12.0C	7.7 8.1	271 389	34 1.70	11 .90	25 1.09	-- --	0 .00	166 2.72	9.4 .20	28 .79	-- --	.00 --	213 189	130 0	1.0 x
04/09/75 0920	5050 5050	11.1 9.9	47.3F 8.5C	7.6 7.4	62 60	-- --	-- --	-- 0.00	-- .75	0 66	46 89	-- --	-- --	-- --	-- --	71		Ex
08/20/75 10:00	5050 5050	8.0 9.7	73.4F 23.0C	7.2 7.6	260 299	-- --	-- --	-- 0.00	0 2.61	159 1.61	-- --	-- --	-- --	-- --	-- --	185		s
C3 3200.00 TULE RIVER SOUTH FORK OF MIDDLE FORK NEAR SPRINGVILL																		
10/30/74 0800	5050 5050	2.50 2.50	10.3 6.2C	46.8F 8.3	232 387	36 1.80	14 1.16	20 .87	-- --	0 .00	211 3.46	4.8 .10	12 .34	-- --	.20 --	200 191	148 0	0.7 x
04/09/75 0800	5050 5050	12.1 10.2	40.5F 4.7C	8.2 8.5	180 308	-- --	-- --	-- 0.00	-- 3.02	3.0 1.84	-- --	-- --	-- --	-- --	-- --	194		s
08/20/75 0830	5050 5050	8.1 8.8	59.9F 15.5C	8.2 8.0	215 364	-- --	-- --	-- 0.00	0 3.56	217 3.56	-- --	-- --	-- --	-- --	-- --	147		x
C3 4149.30 TULE RIVER SOUTH FORK ABOVE CREW CREEK																		
10/30/74 1340	5050 5050	9.6 9.7	59.0F 15.0C	7.7 7.6	146 102	17 .49	3.6 3.31	13 .57	-- --	0 .00	86 1.41	5.8 .12	6.8 .19	-- --	.00 --	120 89	58 0	0.7 x
04/09/75 1200	5050 5050	10.8 10.1	52.2F 11.2C	7.6 7.9	98 138	-- --	-- --	-- 0.00	-- 1.48	0 90	-- --	-- --	-- --	-- --	-- --	91		s
08/20/75 13:00	5050 5050	8.1 10.3	80.6F 27.0C	8.1 8.1	155 160	-- --	-- --	-- 0.00	0 1.46	89 1.46	-- --	-- --	-- --	-- --	-- --	102		s
C4 4950.10 POSO CREEK BELOW GLENVILLE																		
12/16/74 1020n	5050 5050	9.0 9.6	50.0F 10.0C	7.8 8.1	160 217	23 1.15	4.5 .37	15 .65	-- --	0 .00	109 1.79	8.9 .19	6.2 .17	-- +.03	.00 --	148 113	76 0	0.7 x
C5 1220.10 KERN RIVER AT MIRACLE HOT SPRINGS																		
10/02/74 1000	5050 5050	8.6	7.4	9.2	1.7	9.8	--	0	69	5.8	6.8	--	.00	--	60	30	0 0.8	
03/05/75 1045	5050 5050	10.8 10.0	48.2F 9.0C	7.4 7.9	100 143	12 .60	2.7 .22	14 .61	-- --	0 .00	101 1.07	5.4 .20	5.4 .15	-- --	.20 --	87 76	41 0	1.0 x
07/23/75 1130	5050 5050	8.2 9.9	69.8F 21.0C	7.5 7.3	90 95	-- --	-- --	-- 0.00	0 .72	44 5.72	-- --	-- --	-- --	-- --	-- --	60		s
C5 1350.00 KERN RIVER BELOW ISABELLA 04M																		
12/17/74 0915	5050 5050	2.45 1.9	10.7 8.5C	4.7F 8.2	85 122	10 .50	2.2 .18	10 .44	-- --	0 .00	56 80	6.9 .11	2.9 .09	-- +.01	.10 --	66 60	36 0	0.7 x
03/05/75 1030	5050 5050	6.32 6.9	10.7 8.5C	4.7F 7.7	88 134	11 .55	2.6 .21	13 .57	-- --	0 .00	92 75	4.2 14	5.8 11	-- --	.20 --	76 70	38 0	0.9 x
05/27/75 1300	5050 5050	6.20 11.4	10.6F 16.0C	7.3 7.4	90 106	9.1 .45	2.1 .17	10 .44	-- --	0 .00	49 80	4.3 .09	4.7 .13	-- --	.00 --	31 54	0 0	0.8 s
09/03/75 0900	5050 5050	7.8 9.4	69.8F 21.0C	7.3 7.3	100 107	8.8 .43	2.2 .18	9.3 .39	-- --	0 .00	49 80	4.0 .08	4.0 .11	-- --	.10 --	60 52	31 0	0.7 x

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G+H DEPTH	DO SAT	TEMP RH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN C4 MG NA K CO3 HC03 50A CL NO3	MILLIGRAMS PER LITER			MILLIGRAMS PER LITER								
							PERCENT REACTANCE	VALUE	B CL	F NO3	TDS SUM	TH NCH	TURB SAR	REM				
CS 1500.00 KERN RIVER AT KERNVILLE																		
10/02/74 0745	5050 5050	9.7 7.6	1 137	7.5 46	12 14	2.2 1.8	12 0	0 0.00	61 1.00	9.2 1.9	5.0 1.4	-- --	.10 --	91 70	39 0	0.8 T		
12/17/74 0815	5050 5050	12.4 102	3h-3F 7.9	7.9 146	13 45	1.6 1.3	15 52	-- 0.00	66 1.08	9.9 2.1	5.0 1.4	,5 ,01	,20 --	95 78	39 0	1.0 X		
03/05/75 0415	5050 5050	10.3 9.4	45.5F 7.5C	7.7	85 129	2.2 1.8	12 52	-- 0.00	59 0.97	7.2 1.5	5.4 1.5	-- --	,20 --	86 68	39 0	0.8 T		
05/27/75 1345	5050 5050	10.0n 10.8	50.0F 15.0C	7.2	35 38	3.6 1.8	,5 0.4	-- 0.00	3.3 2.8	0 0.00	1.9 0.05	-- --	,00 --	44 18	11 0	0.4 T		
07/23/75 093n	5050 5050	8.6 101	66.2F 19.0C	7.6 80	75 --	-- --	-- --	0 0.00	39 ,64	-- --	-- --	-- --	-- --	72 --	-- --	E S		
09/03/75 083n	5050 5050	8.4 4.6	16.5F 8.6C	7.4	100 142	1.2 1.5	2.7 2.2	13 ,57	-- 0.00	69 1.13	7.7 ,16	5.9 ,17	-- --	,10 --	85 75	41 0	0.9 X	
CS 1660.10 KERN RIVER GROVE FRIEVIEW																		
10/02/74 063n	5050 5050	6.3 7.3	7.6 127	10 50	2.2 1.8	12 52	-- 0.00	0 ,85	52 1.18	8.7 1.16	5.6 1.16	-- --	,10 --	89 64	34 0	0.9 T		
03/05/75 0830	5050 5050	10.6 9.8	44.2F 6.8C	7.3 7.7	85 120	1.0 1.5	1.9 1.6	13 ,57	-- 0.00	53 ,87	8.7 1.18	5.3 1.15	-- --	,20 --	79 65	33 0	1.0 X	
07/23/75 0800	5050 5050	8.1 9.6	61.7F 16.5C	7.6 7.5	65 74	-- --	-- --	0 0.00	33 ,54	-- --	-- --	-- --	-- --	-- --	57 --	-- --	E S	
CS 3110.10 KERN RIVER SOUTH FORK NEAR WELDON																		
10/02/74 0915	5050 5050	R+4 R+4	8.1 513	,45 2.25	9.0 7.4	,56 2.35	-- 4.44	2.0 4.20	256 ,54	26 ,56	20 --	-- --	,50 --	285 282	149 0	1.9 S		
03/05/75 094n	5050 5050	8.8 8.9	53.6F 12.0C	7.5 8.3	400 405	,6 2.30	11 9.00	52 2.26	-- 0.00	262 4.29	27 ,56	20 --	-- --	,50 --	324 285	159 0	1.8 X	
C6 150.00 TEHACHAPI CREEK NEAR TEHACHAPI, CA																		
12/17/74 115n	5050 5050	32.32 9.6	12.2 5.5C	41.5F 7.8	8.2 8.2	1200 1820	166 8.28	58 4.77	145 7.18	-- 0.00	361 5.92	434 9.04	186 5.30	1.3 .02	1270 1190	653 357	2.8 X	
C6 1575.00 CALIENTE CREEK ABOVE TEHACHAPI, CA																		
12/17/74 110n	5050 5050	1.27 9.8	11.5 9.8	47.3F 0.5C	8.2 8.2	650 848	47 3.35	34 2.83	79 3.44	-- 0.00	270 4.43	166 3.46	39 1.10	,80 .06	537 503	259 38	2.1 X	
C6 2050.30 TEJON CREEK AT COMANCHE POINT OIL FIELD																		
12/17/74 142n	5050 5050	9.6n 8.6	54.5F 12.5C	7.9 8.1	1800 2020	108 5.39	89 7.34	221 9.61	-- 0.00	650 10.65	458 9.54	186 3.24	2.0 .03	,80 --	1370 1314	637 104	3.8 X	
AU 7020.00 SAN JACQUIN RIVER NEAR VENALIS																		
10/02/74 103n	5001 5050	6.9 7.4	66 19	F C	7.6	345	-- --	-- --	0 0.00	78 1.28	-- 1.33	,47 --	-- --	207 16.0	207 --	14AF S		
10/16/74 103n	5001 5050	12.37 2700	7.3 78	66 19	F C	7.6	500	-- --	-- 0.00	106 1.74	-- 2.26	,80 18.0	-- --	272 18.0	272 --	24AF S		
10/17/74 0800	5050n 5050n	12.75 3	7.0 73	64 1b	F C	7.2	400	2.20 2.4	12 24	54 52	-- 0.00	103 1.69	,36 1.75	,69 1.95	-- --	274 245	108 24	2.3 X
11/06/74 1425	5001 4500	14.49 3	8.7 84	57 14	F C	7.3	330	-- --	-- 0.00	68 1.11	-- 1.21	,43 1.21	-- --	142 14.2	194 14.2	16AF S		
11/18/74 132n	5001 3670	13.57 3	8.9 88	59 15	F C	7.3	440	-- --	-- 0.00	76 1.25	-- 1.58	,56 1.58	-- --	140 14.0	239 14.0	10AF S		
11/21/74 090n	5001 3670	13.35 3	9.8 93	55.4F 13.0C	7.3 7.7	310 458	21 1.05	10 1.89	53 2.31	-- 0.00	88 1.44	,4 ,92	,61 1.72	,2.7 ,.04	248 236	97 25	2.3 X	
12/17/74 1300	5001 4510	14.62 3	10.1 93	54 12	F C	7.6	375	-- --	-- 0.00	68 1.11	-- 1.49	,53 1.49	-- --	122 12.2	240 12.2	9AF S		
12/19/74 0900	5050n 5050	12.67 77	8.7 16.0C	50.0F 8.1	7.2 525	22 1.05	1.2 2.52	58 23	-- 54	-- 0.00	87 1.43	,67 1.35	-- 1.89	-- --	292 268	108 37	2.4 X	
01/21/75 1600	5001 2750	12.56 3	9.8 87	55 16	F C	7.5	645	-- --	-- 0.00	99 1.62	-- 2.49	,66 2.49	-- --	150 15.0	376 15.0	8AF S		
02/03/75 1450	5001 3325	13.27 3	9.9 98	52 11	F C	7.6	633	-- --	-- 0.00	-- 1.06	-- 2.68	,95 11.6	-- --	116 11.6	376 11.6	16AF S		

TABLE D-2 (Cont'd)
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. O DEPTH	OO SAT	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃ SO ₄ CL NO ₃	MILLIGRAMS PER LITER			MILLIGRAMS PER LITER					
							PERCENT REACTANCE VALUE	8 SI02	F SUM	TOS NCH	TH TURB	REM SAR			
HO 7620 ^												CONTINUED			
03/18/75 1115	5001 5050	16.38 6420 3	9.7 92 13	55 C	F 7.6	408 ✓	-- -- -- --	0 .00	78 1.28	-- 1.38	-- --	14.0	239	22AF	
04/01/75 1240	5001 5050	16.40 6440 3	9.7 92 13	55 C	F 7.6	398	-- -- -- --	0 .00	76 1.25	-- 1.41	-- --	14.0	250	25AF	
04/18/75 1110	5001 5050	13.22 3380 3	9.4 93 15	59 C	F 7.4	633	-- -- -- --	0 .00	110 1.80	-- 80	-- --	17.0	339	26AF	
05/01/75 1335	5001 5050	12.14 2510 3	8.9 95 19	66 C	F 7.8	702	-- -- -- --	0 .00	125 2.05	-- 121 3.41	-- --	16.0	472	32AF	
05/15/75 1210	5001 5050	13.79 3870 3	9.5 100 18	66 C	F 7.8	405	-- -- -- --	0 .00	83 1.36	-- 54 1.52	-- --	16.0	240	19AF	
06/03/75 1700	5001 5050	16.61 6670 3	8.9 95 19	66 C	F 7.3	198 ✓	-- -- -- --	0 .00	44 .72	-- 23 .65	-- --	10.0	107	10AF	
06/17/75 1615	5001 5050	17.69 7930 3	8.7 93 19	66 C	F 7.6	140	-- -- -- --	0 .00	37 .61	-- 15 .42	-- --	10.0	81	17AF	
06/25/75 1010	5050 5001	8.2 2930 3	66 88 19	66 C	F 7.8	531	-- -- -- --	0 .00	110 1.80	-- -- --	-- --	16.2	38AF		
07/01/75 1535	5001 5050	9.8 109 3	70 21 C	8.2 1 C	F 7.36	736	-- -- -- --	0 .00	145 2.38	-- 120 3.38	-- --	16.0	438	32AF	
07/15/75 1510	5001 5050	8.7 89 22	72 C	8.2 22	F 7.8	778	-- -- -- --	0 .00	151 2.47	-- 59 1.88	-- --	17.0	414	50AF	
07/23/75 1035	5050 5001	7.6 89 25	77 C	7.4 7.9	F 7.9	865	-- -- -- --	0 .00	132 2.16	-- -- --	-- --	18.6	54AF		
08/12/75 1615	5001 5050	9.4 115 26.0C	76.8F 27	7.2 C	F 7.2	733 ✓	-- -- -- --	0 .00	106 2.99	-- 106 2.93	-- --	18.0	396	48AF	
08/26/75 1200	5001 5050	11.14 1790 3	7.3 88 25	77 C	F 7.7	685	-- -- -- --	0 .00	104 2.93	-- 21.0	-- --	420	31AF		
09/11/75 1410	5001 5050	12.16 2530 3	7.9 80 22	72 C	F 7.8	471 ✓	-- -- -- --	0 .00	82 1.34	-- 71 2.00	-- --	16.0	255	19AF	
09/25/75 1330	5001 5050	12.81 3050 3	7.6 86 23	73 C	F 7.8	379	-- -- -- --	0 .00	75 1.23	-- 49 1.38	-- --	14.0	210	19AF	

TABLE D-3
MINOR ELEMENT ANALYSES OF SURFACE WATER

Abbreviations and Codes used in this table are:

Abbreviations

D Dissolved Concentration
T Total Concentration

Sampler (SAMP) and Laboratory (LAB) Codes

5001 U. S. Bureau of Reclamation
5050 Department of Water Resources

TABLE D-3
MINOR ELEMENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMPLE NO.	DEPTH IN FEET	DISCH. EC	TEMP. DEG.	CONSTITUENTS IN MILLIGRAMS PER LITER										LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM.
					ARSENIC	BARIUM CATION	CHROMIUM (ALL)	COPPER (CHROME)	IRON	MANGANESE	POLYCHLORINATED BENZENE	THIOL T	WATER T	WATER T	WATER T			
III 4700.00 SALT SLOUGH NE STEVINSON																		
08/20/75 5:50 1100	5700	1100	23 C	0.01	T	--	0.00	T	0.01	T	0.02	0.01	T	0.01	T	0.0002 T	--	0.03 T
IV 5166.50 CANAL CREEK AT DANALE ROAD																		
04/16/75 5:50 1630	5500	150	12+C 50	7.0	--	--	0.00	T	0.01	T	--	0.00	T	0.0000 T	--	--	--	
V 7020.00 SAN JOAQUIN RIVER NEAR VERNALIS																		
12/19/74 5:50 0900	5500	358	10+C 7.2	--	--	--	0.00	0	0.01	0	--	--	0.0000 T	--	--	0.01	0	
01/21/75 5:50 1200	5001	3	645	10 C 7.5	0.00	T	0.00	T	0.01	T	0.00	T	0.00	T	0.0000 T	--	0.01 T	
01/21/75 5:50 1201	5001	3	645	10 C 7.5	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.0000 T	--	0.01 0	
05/01/75 5:50 1335	5500	3	702	19 C 7.8	0.00	0	0.00	0	0.00	0	0.02	0	0.00	0	0.0000 T	--	0.05 0	
05/01/75 5:50 1336	5001	3	702	19 C 7.8	0.00	T	0.00	T	0.00	T	0.04	0	0.00	T	0.0001 T	--	0.05 T	
09/11/75 5:50 1410	5001	3	471	22 C 7.8	0.00	D	0.00	D	0.00	D	0.00	0	0.00	D	0.0001 T	--	0.00 0	
09/11/75 5:50 1411	5001	3	471	22 C 7.8	0.00	T	0.00	T	0.01	T	0.01	T	0.00	T	0.0000 T	--	0.01 T	
VI 60 7375.00 SAN JOAQUIN RIVER AT FREMONT FORK BRIDGE																		
12/19/74 5:50 1240	5500	1450	10+C 7.8	--	--	--	0.01	T	1.0	T	2.1	T	--	0.0000 T	--	0.0	T	
05/21/75 5:50 1315	5500	400	20+C 8.1	0.00	T	0.00	T	0.01	T	0.01	T	0.00	T	0.0001 T	--	0.01 T		
08/28/75 5:50 1130	5500	1000	24 C 7.4	0.00	T	0.00	T	0.02	T	0.02	T	0.01	T	0.0003 T	--	0.04 T		
VII 60 7065.00 SAN JOAQUIN RIVER AT FRIANT DAM																		
12/19/74 5:50 1400	5500	40	9.5C 6.8	--	--	--	0.00	T	0.00	T	0.00	T	--	--	--	--	--	
VIII H3 1158.10 STANISLAUS RIVER BELOW TULLOCK DAM																		
12/20/74 5:50 0930	5500	45	10.5C 7.4	--	--	--	0.00	T	0.01	T	0.19	T	--	0.0000 T	--	0.00	T	
IX H5 1200.00 MERCED RIVER BELOW EXCHEQUER DAM																		
12/20/74 5:50 1330	5500	35	12.5C 6.8	--	--	--	0.00	T	0.00	T	0.62	T	--	0.0000 T	--	0.00 T		
X H5 6152.50 HURNS CREEK AT MERCED MARIPOSA COUNTY LINE																		
04/16/75 5:50 0915	5500	R0	12.5C R0	--	--	--	0.00	T	0.00	T	--	0.00	T	0.0000 T	--	--	--	
XI H6 2204.10 MARIPOSA CREEK ABOVE MARIPOSA RESERVOIR																		
04/16/75 5:50 1200	5500	135	12.5C 8.2	--	--	--	0.00	T	0.01	T	--	0.00	T	0.0000 T	--	--	--	
XII H7 1180.00 SAN JOAQUIN RIVER BELOW KERCKHOFF NEAR PRATHER																		
12/10/74 5:50 1100	5500	25	9.5C 7.1	--	--	--	--	--	--	--	--	--	--	--	--	0.01	T	
XIII CC 2105.00 KAWeah RIVER BELOW TERMINUS DAM																		
12/16/74 5:50 1120	5500	120	11.5C 7.9	--	--	--	0.00	T	0.00	T	0.56	T	--	0.0000 T	--	0.01 T		
XIV LN 3196.50 TULE RIVER BELOW SUCCESS DAM																		
12/16/74 5:50 1400	5500	345	15.5C 7.5	--	--	--	0.00	T	0.00	T	0.19	T	--	0.0000 T	--	0.00 T		
XV CO 5150.00 KERN RIVER NEAR BAKERSFIELD																		
12/16/74 5:50 1010	5500	105	9.5C 8.3	--	--	--	0.00	T	0.00	T	0.34	T	--	0.0000 T	--	0.01 T		
XVI CI 1140.00 KING'S RIVER BELOW PINE FLAT RESERVOIR																		
12/18/74 5:50 0850	5500	25	11.5C 7.2	--	--	--	0.00	T	0.00	T	0.29	T	--	0.0000 T	--	0.00 T		

TABLE D-4
MISCELLANEOUS CONSTITUENTS OF SURFACE WATER

Abbreviations and Codes used in this table are:

Abbreviations

BOD	Biochemical Oxygen Demand (B = 5 days at 20° C)
COD	Chemical Oxygen Demand
SUS S	Suspended Solids 5 = 105° C 8 = 180° C
V SUS S	Volatile Suspended Solids
TOC	Total Organic Carbon
TURB	Turbidity in Turbidity Units

Sampler (SAMP) and Laboratory (LAB) Codes

5001	U. S. Bureau of Reclamation
5050	Department of Water Resources

TABLE D-4
 MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE	TIME	SAMP	LAB	TEMP	DO	F-PH	L-PH	DISCH	MBAS	DEPTH	TURB	T-L	CMLR	O+8	ML/L	SET S			800	CDO	CYANIDE	TOC	TOOD	BROMIDE	T SULF	CC EXT
																SUS	SUS	V								
80 0109.30																										
06/25/75	0945	5050	1A	C	10.5	--	--	--	--	--	--	--	--	--	--	552	8	62	--	--	--	--	--	--	--	--
06/25/75	0945	5050	1A	C	10.5	8.0	--	--	--	--	--	--	--	--	--	4.8	8	37	--	--	--	--	--	--	--	--
07/23/75	0820	5050	21	C	11.3	8.5	--	1	--	--	--	--	--	--	--	8.6	8	34	--	--	--	--	--	--	--	--
80 0349.10																										
06/24/75	1030	5050	10	C	5.4	7.9	--	3	--	--	--	--	--	--	--	9.1	8	31	--	--	--	--	--	--	--	--
06/24/75	1030	5050	1070	--	--	--	--	--	--	--	--	--	--	--	--	88	8	18	--	--	--	--	--	--	--	--
07/22/75	0730	5050	23	C	2.4	7.3	--	3	--	--	--	--	--	--	--	6.7	R	31	--	--	--	--	--	--	--	--
09/30/75	1005	5050	20	C	1.3	7.6	--	3	--	--	--	--	--	--	--	6.4	R	26	--	--	--	--	--	--	--	--
80 0470.00																										
04/03/75	0900	5050	11,0C	8.3	7.7	--	--	--	--	--	--	--	--	--	--	76	5	7	--	--	--	--	--	--	--	--
05/21/75	1230	5050	17.0C	8.4	7.4	--	--	--	--	--	--	--	--	--	--	144	5	48	--	--	--	--	--	--	--	--
06/24/75	0945	5050	20	C	6.4	8.1	--	3	--	--	--	--	--	--	--	6.2	B	35	--	--	--	--	--	--	--	--
06/24/75	0945	5050	20	C	6.4	8.1	--	--	--	--	--	--	--	--	--	120	A	21	--	--	--	--	--	--	--	--
07/23/75	0950	5050	24	C	5.6	7.8	--	3	--	--	--	--	--	--	--	6.4	R	35	--	--	--	--	--	--	--	--
08/20/75	1100	5050	23	C	7.3	--	--	--	--	--	--	--	--	--	--	6.7	R	74	--	20	--	--	--	--	--	--
08/27/75	1100	5050	22.0C	5.9	7.4	--	--	--	--	--	--	--	--	--	--	154	5	--	--	--	--	--	--	--	--	--
09/30/75	1300	5050	20	C	6.6	8.0	--	3	3	--	--	--	--	--	--	181	S	--	--	--	--	--	--	--	--	--
09/30/75	1300	5050	20	C	6.6	8.0	--	3	3	--	--	--	--	--	--	3.2	R	30	--	--	--	--	--	--	--	--
80 0770.00																										
04/08/75	1030	5050	13.0C	10.3	7.5	--	--	--	--	--	--	--	--	--	--	44	5	5	--	--	--	--	--	--	--	--
09/11/75	1100	5050	310	15.20	--	--	--	--	--	--	--	--	--	--	--	192	5	--	--	--	--	--	--	--	--	--
80 0936.30																										
06/25/75	5050	5001	--	--	--	--	--	--	--	--	--	--	--	--	--	337	A	35	--	--	--	--	--	--	--	--
06/25/75	0950	5050	17	C	8.4	8.0	--	3	--	--	--	--	--	--	--	5.1	R	31	--	--	--	--	--	--	--	--
07/23/75	0930	5050	22	C	7.9	8.2	--	3	--	--	--	--	--	--	--	14	8	19	--	--	--	--	--	--	--	--
80 0955.30																										
07/22/75	1255	5050	20	C	1.7	7.3	--	1	--	--	--	--	--	--	--	0.1	8	8	--	--	--	--	--	--	--	--
80 3115.00																										
05/28/75	1400	5050	17.5C	9.5	7.3	--	--	--	--	--	--	--	--	--	--	20	S	--	--	--	--	--	--	--	--	--
06/25/75	1205	5050	19	C	7.5	--	--	--	--	--	--	--	--	--	--	1.7	B	--	--	--	--	--	--	--	--	--
07/23/75	1110	5050	24	C	8.1	7.5	--	3	--	--	--	--	--	--	--	1.4	R	--	--	--	--	--	--	--	--	--
08/27/75	1500	5050	23.0C	8.0	7.5	--	--	--	--	--	--	--	--	--	--	38	S	--	--	--	--	--	--	--	--	--
80 3185.00																										
08/18/75	1600	5050	17.0C	9.9	8.1	--	--	--	--	--	--	--	--	--	--	1.1	R	3	--	--	--	--	--	--	--	--
09/17/75	1700	5050	23.0C	8.6	7.8	--	--	--	--	--	--	--	--	--	--	1.6	B	2	--	--	--	--	--	--	--	--
80 4105.00																										
05/28/75	1400	5050	24.0C	7.5	7.3	--	--	--	--	--	--	--	--	--	--	42	S	--	--	--	--	--	--	--	--	--
06/25/75	1125	5050	20	C	9.1	--	--	--	--	--	--	--	--	--	--	3.4	R	--	--	--	--	--	--	--	--	--
07/23/75	1005	5050	24	C	7.1	7.5	--	1	--	--	--	--	--	--	--	2.0	B	--	--	--	--	--	--	--	--	--
08/27/75	1330	5050	24.0C	8.2	7.6	--	--	--	--	--	--	--	--	--	--	52	S	--	--	--	--	--	--	--	--	--

TABLE D-4 (Cont'd)
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.M.	F-PH L-PH	DISCH MBAS	DEPTH T+L	D+G ML/L	COLOR MG/L	SET S			800 SUS 5	COD V SUS 5	CYANIDE PPM	TOC PPM	IODIDE PPM	BROMIDE PPM	SULFITE PPM	T SULF PPM	CC CAT PPM
									TURB	CHLOR	PHENOLS									
80 4175.00 TUOLUMNE RIVER AT LA GRANGE BRIDGE																				
06/04/75 1300	5050 5050				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/28/75 1400	5050 5050	13.3C 32	10.5	B.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
80 4421.30 TURLOCK SEWAGE TREATMENT PLANT																				
06/24/75 1255	5050 5001	21 685	C 3.4		--	--	--	--	--	--	--	61.0 8	100	--	--	--	--	--	--	--
07/22/75 1145	5050 621	24 621	C 5.8	B.1	--	1	--	--	--	--	--	71 8	135	--	--	--	--	--	--	--
09/30/75 1345	5050 740	21 11.6	C 11.6	B.8	--	1	--	--	--	--	--	55 8	225	--	--	--	--	--	--	--
80 4492.30 MODESTO SEWAGE TREATMENT PLANT																				
06/24/75 1405	5050 5001	22 682	C 3.0		--	--	--	--	--	--	--	39.0 8	190	--	--	--	--	--	--	--
07/22/75 1300	5050 1530	28 1530	C 9.9	9.2	--	3	--	--	--	--	--	82 8	68	--	--	--	--	--	--	--
80 4974.30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 2																				
06/25/75 1035	5050 230	17 230	C 12.9	7.8	--	3	--	--	--	--	--	2.2 8	4	--	--	--	--	--	--	--
06/25/75 1035	5050 5001	17 369	C 12.9		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/23/75 0840	5050 230	23 230	C 8.4	B.0	--	3	--	--	--	--	--	71 8	13	--	--	--	--	--	--	--
80 4975.30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 5																				
06/24/75 1500	5050 5001	19 1500	C 9.7		--	--	--	--	--	--	--	38 8	18	--	--	--	--	--	--	--
06/24/75 1500	5050 369	19 369	C 9.7		--	2	--	--	--	--	--	6.2 8	9	--	--	--	--	--	--	--
07/22/75 1405	5050 432	24 432	C 8.2	7.7	--	2	--	--	--	--	--	5.7 8	23	--	--	--	--	--	--	--
09/30/75 1545	5050 522	21 522	C 7.3	B.0	--	2	--	--	--	--	--	8.1 8	34	--	--	--	--	--	--	--
80 4976.30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 6 AND 7																				
06/24/75 1155	5050 317	19.5C 7.5	7.5	7.8	--	1	--	--	--	--	--	4.0 8	21	--	--	--	--	--	--	--
06/24/75 1155	5050 317	19.5C 7.5	7.5	7.8	--	--	--	--	--	--	--	7 8	5	--	--	--	--	--	--	--
07/22/75 1100	5050 375	21 375	C 6.8	7.5	--	1	--	--	--	--	--	2.7 8	12	--	--	--	--	--	--	--
09/30/75 1250	5050 401	21 401	C 7.9	7.8	--	1	--	--	--	--	--	3.1 8	16	--	--	--	--	--	--	--
80 5131.00 MERCEO RIVER AT MILLIKEN BRIDGE																				
05/22/75 1200	5050 70	21.0C 8.1	8.1	B.1	--	--	--	--	--	--	--	17 5	--	--	--	--	--	--	--	--
06/24/75 0900	5050 78	19 78	C 8.1	6.9	--	--	--	--	--	--	--	1.4 8	--	--	--	--	--	--	--	--
07/22/75 0910	5050 150	29 150	C 7.2	7.2	--	3	--	--	--	--	--	0.8 8	--	--	--	--	--	--	--	--
08/27/75 1200	5050 115	23.0C 8.1	8.1	7.2	--	--	--	--	--	--	--	22 5	--	--	--	--	--	--	--	--
09/30/75 0915	5050 50	17 50	C 8.6	7.2	--	3	--	--	--	--	--	1.1 8	--	--	--	--	--	--	--	--
09/30/75 0916	5050 5001	17.0C 8.6	8.6	7.2	--	3	--	--	--	--	--	15 5	10	--	--	--	--	--	--	--
80 5166.50 CANAL CREEK AT DAKDALE ROAD																				
02/05/75 1730	5050 45	10.5C 10.2	10.2	7.3	15 E	--	--	--	--	--	--	15 8	--	--	--	--	--	--	--	--
03/12/75 1530	5050 55	15.2C 10.3	10.3	7.2	25+	--	--	--	--	--	--	6.2 8	--	--	--	--	--	--	--	--
04/16/75 1630	5050 50	12.8C 10.8	10.8	7.9	150	--	--	--	--	--	--	1.0 8	--	--	--	--	--	--	--	--
80 6369.50 DUTCHMAN CREEK AT BASTER ROAD																				
02/05/75 0850	5050 90	9 C 8.5	8.5	7.2	--	--	--	--	--	--	--	4.4 8	--	--	--	--	--	--	--	--
03/12/75 0720	5050 50	53.0F 8.1	7.9	7.9	2.6	--	--	--	--	--	--	52 5	16	--	--	--	--	--	--	--
04/16/75 0755	5050 212	12.0C 9.0	9.0	8.3	--	--	--	--	--	--	--	7 5	2	--	--	--	--	--	--	--

TABLE D-4 (Cont'd)
 MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE	SAMP	TEMP	OD	F-PH	OISCH	DEPTH	T+L	OD ₄₄₀	SET S	BOD ₅	SUS S	V SUS S	CYANIDE	TOC	IODIDE	BROMIDE	T SULF	CC EXT
TIME	LAB	EC	B.O.M.	L-PM	MBS	TURB	CHLOR	MG/L	800	SUS S	V SUS S	PHENOLS	DOC	TODOR	SULFITE	T SULF	CA EXT	
80 6349.50 DEADMAN CREEK AT BAXTER ROAD																		
02/05/75	5050	9	C	10.1	7.2	--	--	--	--	4.4	8	--	--	--	--	--	--	--
07/05	5050	70		4.50						53	5	11						
03/12/75	5050	11.6C	0.1	7.5	11.8	--	--	--	--	2.0	8	--	--	--	--	--	--	
08/00	5050	126				--				4	5	2						
04/16/75	5050	12.5C	9.5	7.9	--	--	--	--	--	2.6	8	--	--	--	--	--	--	
08/15	5050	172		3.08						6	5	4						
80 7020.00 SAN JOAQUIN RIVER NEAR VERNALIS																		
80 7040.00 SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE																		
05/28/75	5050	24.0C	9.0	7.9	--	--	--	--	--	209	5	--	--	--	--	--	--	--
1330	5050	500	17.53															
06/25/75	5050	--																
08/01	5050	--																
06/25/75	5050	18	C	7.3	7.9	--	3	--	--	14	F	--	--	--	--	--	--	--
08/05	5050	586	16.30															
07/23/75	5050	25	C	6.1	7.9	--	3	--	--	12	F	--	--	--	--	--	--	--
08/27/75	5050	24.0C	7.1	7.5	--	--	--	--	--	--								
1400	5050	800	15.01															
80 7080.00 SAN JOAQUIN RIVER NEAR GRAYSON																		
04/03/75	5050	13.0C	9.4	7.7	--	--	--	--	--	52	5	7	--	--	--	--	--	--
1240	5050	--																
06/25/75	5050	14	C	8.0	--	--	--	--	--	143	8	21	--	--	--	--	--	--
08/05	5050	--																
06/25/75	5050	18	C	8.0	7.9	--	3	--	--	15	F	--	--	--	--	--	--	--
08/05	5050	526																
07/23/75	5050	24	C	6.8	7.7	--	3	--	--	15	F	--	--	--	--	--	--	--
08/27/75	5050	24.0C	6.7	7.6	--	--	--	--	--	151	5	--	--	--	--	--	--	--
1300	5050	800																
80 7200.00 SAN JOAQUIN RIVER AT PATTERSON BRIDGE																		
06/24/75	5050	20	C	8.6	7.9	--	--	--	--	73	8	13	--	--	--	--	--	--
1230	5050	494																
06/24/75	5050	20	C	8.6	7.9	--	3	--	--	9.6	F	--	--	--	--	--	--	--
1230	5050	494	34.46															
07/22/75	5050	28	C	8.9	8.1	--	3	--	--	13	F	--	--	--	--	--	--	--
1220	5050	756																
09/30/75	5050	19	C	8.1	7.8	--	3	--	--	2.8	B	--	--	--	--	--	--	--
1315	5050	386	55.63															
09/30/75	5050	19	C	8.1	7.8	--	3	--	--	7.6	F	--	--	--	--	--	--	--
1316	5050	386	55.63															
09/30/75	5050	19	C	8.1	7.8	--	3	--	--	8.4	F	--	--	--	--	--	--	--
1317	5050	386	55.63															
09/30/75	5050	19.0C	8.1	7.8	--	--	3	--	--	49	5	15	--	--	--	--	--	--
1318	5050	386	55.63															
80 7250.00 SAN JOAQUIN RIVER AT CROW'S LANDING BRIDGE																		
06/24/75	5050	20	C	8.1	7.9	--	--	--	--	54	8	15	--	--	--	--	--	--
1140	5050	464																
06/24/75	5050	20	C	8.1	7.9	--	3	--	--	9.1	F	--	--	--	--	--	--	--
1140	5050	464	41.18															
09/30/75	5050	20	C	8.0	7.7	--	3	--	--	2.5	B	--	--	--	--	--	--	--
1230	5050	342																
09/30/75	5050	20	C	8.0	7.7	--	3	--	--	7.0	F	--	--	--	--	--	--	--
1231	5050	342																
09/30/75	5050	20	C	8.0	7.7	--	3	--	--	7.7	F	--	--	--	--	--	--	--
1232	5050	342																
09/30/75	5050	20.0C	8.0	7.7	--	--	3	--	--	--	4.5	13	--	--	--	--	--	--
1233	5050	342																
HO 7375.00 SAN JOAQUIN RIVER AT FREMONT FORO BRIDGE																		
04/03/75	5050	13.0C	8.6	7.5	--	--	--	--	--	63	5	12	--	--	--	--	--	--
0830	5050	1002	57.47															
05/21/75	5050	20.0C	8.0	7.5	--	--	--	--	--	74	5	20	--	--	--	--	--	--
1315	5050	900																
05/28/75	5050	23.0C	10.3	6.2	--	--	--	--	--	95	5	--	--	--	--	--	--	--
1100	5050	1000	56.26															
06/24/75	5050	21	C	7.6	8.0	--	2	--	--	18	F	--	--	--	--	--	--	--
1035	5050	1145	55.67															
06/24/75	5050	21	C	7.6	8.0	--	--	--	--	105	8	19	--	--	--	--	--	--
1035	5050	1145																
07/22/75	5050	24	C	7.3	7.9	--	2	--	--	14	F	--	--	--	--	--	--	--
1035	5050	813																
08/20/75	5050	24	C	7.4	7.6	--	--	--	--	7.0	8	41	--	24	--	--	--	--
1130	5050	1000																
08/27/75	5050	23.0C	7.4	7.6	--	--	--	--	--	152	8	40	--	24	--	--	--	--
1000	5050	900	57.11															

TABLE 0-4 (Cont'd)
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

TABLE D-4 (Cont'd)
 MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO mg/l	F+PH L+PH	DISCH MBAS	DEPTH ft	T+L TURB	CHLOR COLOR	ML/L COLOR mg/l	SET S			ROD SUS S	COO V SUS S	CYANIDE PHEOLIS	TOC DOC	IODOINE TOD	BROMIDE SULFIDE	T SULF D SULF	CC EXT CA EXT
										0+0	ML/L	SUS S								
BA 1600.00 TUOLUMNE RIVER ABOVE EARLY INTAKE																				
06/04/75 0900	5050 5050	9.8C 10.6	6.8	--	--	--	--	--	--	0+7	8	3	--	--	--	--	--	--	--	--
09/24/75 0930	5050 5050	13.8C 9.6	6.8	--	--	--	--	--	--	0+5	R	2	--	--	--	--	--	--	--	--
BA 1850.10 TUOLUMNE RIVER AT TUOLUMNE MEADOWS																				
06/04/75 0630	5050 5050	2.1C 9.5	6.8	A	--	--	--	--	--	0+7	8	2	--	--	--	--	--	--	--	--
09/24/75 0700	5050 5050	4.3C 7.9	7.0	18	--	--	--	--	--	0+8	8	1	--	--	--	--	--	--	--	--
85 1320.00 MERCEO RIVER AT BAGBY																				
11/13/74 1530	5050 5050	21.5C 11.2	7.1	63	--	--	--	--	--	0+8	8	--	--	--	--	--	--	--	--	--
85 1410.10 MERCEO RIVER ABOVE BRICEBURG																				
11/13/74 1330	5050 5050	10.0C 12.0	7.3	40	--	--	--	--	--	0+8	8	--	--	--	--	--	--	--	--	--
85 1517.10 MERCEO RIVER BELOW EL PORTAL																				
11/13/74 1130	5050 5050	8.6C 11.1	7.2	37	--	--	--	--	--	1+1	8	--	--	--	--	--	--	--	--	--
85 1519.50 MERCEO RIVER AT JUNCTION BIG OAK FLAT RD NO AND Hwy 140																				
11/13/74 0930	5050 5050	7.2C 8.1	6.8	30	--	--	--	--	--	0+6	8	--	--	--	--	--	--	--	--	--
85 1700.00 MERCEO RIVER AT HAPPY ISLES BRIDGE NEAR YOSEMITE																				
11/13/74 0715	5050 5050	4.8C 11.3	7.0	23	1,37	--	--	--	--	0+6	8	--	--	--	--	--	--	--	--	--
85 5152.10 REAR CREEK ABOVE BEAR CREEK RESERVOIR																				
02/05/75 1445	5050 75	9.5C 10.8	+7.5	300 E	--	--	--	--	--	1+2	8	--	--	--	--	--	--	--	--	--
85 6152.50 BURNS CREEK AT MERCEO MARIPOSA COUNTY LINE																				
02/05/75 1625	5050 105	11.5C 10.2	7.5	50 E	--	--	--	--	--	1+3	8	--	--	--	--	--	--	--	--	--
03/12/75 0930																				
03/12/75 150	5050 132	11.7C 10.6	8.0	65.1	--	--	--	--	--	1+0	8	--	--	--	--	--	--	--	--	--
04/16/75 1430																				
04/16/75 185	5050 185	15.5C 9.5	7.9	15	--	--	--	--	--	1+1	8	--	--	--	--	--	--	--	--	--
85 6152.50 BURNS CREEK AT MERCEO MARIPOSA COUNTY LINE																				
02/05/75 1250	5050 115	11.5C 10.2	7.5	50 E	--	--	--	--	--	15	5	6	--	--	--	--	--	--	--	--
03/12/75 0930																				
03/12/75 150	5050 150	10.7C 10.5	7.4	35.1	--	--	--	--	--	1+2	8	--	--	--	--	--	--	--	--	--
04/16/75 0915																				
04/16/75 205	5050 205	12.0C 10.3	8.0	8.0	--	--	--	--	--	1+0	8	--	--	--	--	--	--	--	--	--
86 2020.10 OWENS CREEK ABOVE OWENS RESERVOIR																				
02/05/75 1250	5050 115	10.0C 10.8	7.8	75 E	--	--	--	--	--	2+2	8	--	--	--	--	--	--	--	--	--
03/12/75 0920																				
03/12/75 210	5050 210	11 C 11.0	8.2	12.2	--	--	--	--	--	1+4	8	--	--	--	--	--	--	--	--	--
04/16/75 1245																				
04/16/75 249	5050 249	14.0C 8.4	11.3	--	--	--	--	--	--	2+1	8	--	--	--	--	--	--	--	--	--
86 2204.10 MARIPOSA CREEK ABOVE MARIPOSA RESERVOIR																				
02/05/75 1040	5050 60	8.5C 11.1	7.4	200 E	--	--	--	--	--	1+4	8	--	--	--	--	--	--	--	--	--
03/12/75 1210																				
03/12/75 121	5050 121	17.2C 11.3	8.2	121	--	--	--	--	--	1+2	8	--	--	--	--	--	--	--	--	--
04/16/75 1200																				
04/16/75 135	5050 135	17.0C 10.9	8.2	--	--	--	--	--	--	1+3	8	--	--	--	--	--	--	--	--	--
87 1340.00 SAN JOAQUIN RIVER ABOVE WILLOW CREEK NEAR AUBREY																				
10/08/74 0830	5050 22	9.7C 8.6	6.8	--	--	--	--	--	--	0+7	8	--	--	--	--	--	--	--	--	--
07/08/75 0930																				
07/08/75 0930	5050 50	6.8	--	--	--	--	--	--	--	0+9	R	4	--	--	--	--	--	--	--	--
87 1532.50 SAN JOAQUIN RIVER BELOW SHAFELAT CREEK																				
10/08/74 1245	5050 50	14.5C 9.7	7.3	--	--	--	--	--	--	0+7	R	--	--	--	--	--	--	--	--	--
07/08/75 1230																				
07/08/75 15	5050 15	13.0C 10.2	8.1	--	--	--	--	--	--	1+2	R	3	--	--	--	--	--	--	--	--
87 4250.50 SAN JOAQUIN RIVER SOUTH FOR MONO HOT SPRINGS																				
10/08/74 1200	5050 20	9.5C 9.4	6.9	--	--	--	--	--	--	0+6	8	--	--	--	--	--	--	--	--	--
07/08/75 0930																				
07/08/75 25	5050 25	17.0C 7.4	6.8	--	--	--	--	--	--	0+8	R	1	--	--	--	--	--	--	--	--

TABLE D-4 (Cont'd)
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE	TIME	SAMP	TEMP	DO	F-PH	L-PM	DISCH	DEPTH	TTL	O+G	ML/L	SET 5				TOC	IODIOE	BROMIOE	T SULF	CC EXT					
												MBS	TURB	CHLOR	COLOR	MO/L	SUS	SUS	V SUS	SUS	PHENOLS	DOC	TODOR	SULFITE	O SULF
CO 2550.30 KAWeah RIVER AT LEMONCOVE																									
10/16/74	5050	21:10	9.8	7.5	--	--	--	--	--	--	--	1.1 R	--	--	--	--	--	--	--	--	--				
1430	5050	120										8	5	5											
04/23/75	5050	57.0F	11.2		--	--	--	--	--	--	--	1.4 R	3	--	--	--	--	--	--	--	--				
1400	5050	112																							
08/06/75	5050	23:5C	B.6	7.1	--	--	--	--	--	--	--	0.6 R	1	--	--	--	--	--	--	--	--				
1400	5050	50										--	--	--											
CO 3195.00 TULE RIVER AT WORTH BRIDGE NEAR PORTERVILLE																									
10/30/74	5050	18:0C	7.R	7.7	--	--	--	--	--	--	--	2.0 C	--	--	--	--	--	--	--	--	--				
1500	5050	232										30	5	7											
04/09/75	5050	13:5C	11.8	7.8	--	--	--	--	--	--	--	2.2 R	5	--	--	--	--	--	--	--	--				
1320	5050	180																							
08/20/75	5050	24:0C	B.0	7.0	--	--	--	--	--	--	--	2.5 R	5	--	--	--	--	--	--	--	--				
1430	5050	145										--	--	--											
CO 5140.10 KERN RIVER AT HART PARK																									
10/02/74	5050	9.6	7.7	--	--	--	--	--	--	--	--	0.6 R	--	--	--	--	--	--	--	--	--				
1300	5050											5	5	4											
07/23/75	5050	23:0C	B.3	7.4	--	--	--	--	--	--	--	0.8 R	3	--	--	--	--	--	--	--	--				
1400	5050	97										--	--	--											
CO 5180.10 KERN RIVER AT RANCHERIA BRIDGE																									
10/02/74	5050	9.3	7.7	--	--	--	--	--	--	--	--	0.9 R	--	--	--	--	--	--	--	--	--				
1200	5050											3	5	3											
07/23/75	5050	23:0C	B.2	7.5	--	--	--	--	--	--	--	1.2 R	2	--	--	--	--	--	--	--	--				
133n	5050	93										--	--	--											
C1 1115.50 KINGS RIVER NEAR PIEORA																									
10/23/74	5050	16:5C	10.2	7.2	--	--	--	--	--	--	--	0.8 R	--	--	--	--	--	--	--	--	--				
1545	5050	25										4	5	4											
05/07/75	5050	11:0C	11.9	B.4	--	--	--	--	--	--	--	0.8 R	2	--	--	--	--	--	--	--	--				
1100	5050	30										--	--	--											
C1 1320.00 RIO CREEK ABOVE PINE FLAT RESERVOIR																									
10/23/74	5050	19:0C	10.1	7.9	--	--	--	--	--	--	--	0.8 B	--	--	--	--	--	--	--	--	--				
1330	5050	130	1.3R									4	5	3											
05/07/75	5050	13:0C	10.3	7.4	--	--	--	--	--	--	--	0.9 B	2	--	--	--	--	--	--	--	--				
1230	5050	50	2.4R									--	--	--											
C1 1460.00 KINGS RIVER BELOW NORTH FORK																									
10/23/74	5050	16:0C	10.6	7.3	--	--	--	--	--	--	--	0.2 B	--	--	--	--	--	--	--	--	--				
1215	5050	45										1	5	1											
05/07/75	5050	12:8C	10.9	7.2	--	--	--	--	--	--	--	0.9 R	2	--	--	--	--	--	--	--	--				
1340	5050	30	5.2R									--	--	--											
C1 4115.30 KINGS RIVER SOUTH FORK AT CEDAR GROVE																									
10/23/74	5050	7.1C	10.1	7.3	--	--	--	--	--	--	--	0.1 B	--	--	--	--	--	--	--	--	--				
0830	5050	34										0	5	0											
05/07/75	5050	5.0C	11.4	7.6	--	--	--	--	--	--	--	0.5 B	2	--	--	--	--	--	--	--	--				
0730	5050	22										--	--	--											
C2 1210.30 KAWeah RIVER ABOVE LAKE KAWeah																									
10/16/74	5050	20:0C	9.6	7.6	--	--	--	--	--	--	--	0.4 B	--	--	--	--	--	--	--	--	--				
1245	5050	125										5	5	3											
04/23/75	5050	57.0F	10.4	7.5	--	--	--	--	--	--	--	1.1 R	2	--	--	--	--	--	--	--	--				
1300	5050											--	--	--											
08/06/75	5050	25:5C	8.0	7.8	--	--	--	--	--	--	--	0.5 B	1	--	--	--	--	--	--	--	--				
1300	5050	80										--	--	--											
C2 2010.30 KAWeah RIVER NORTH FORK NEAR MOUTH																									
10/16/74	5050	15:7C	9.6	7.6	--	--	--	--	--	--	--	0.5 B	--	--	--	--	--	--	--	--	--				
0950	5050	158										9	5	4											
04/23/75	5050	53.0F	10.8	7.4	--	--	--	--	--	--	--	0.9 B	2	--	--	--	--	--	--	--	--				
1015	5050	84										--	--	--											
08/06/75	5050	24:0C	8.1	7.6	--	--	--	--	--	--	--	0.4 B	1	--	--	--	--	--	--	--	--				
0930	5050	52										--	--	--											
C2 3147.00 KAWeah RIVER MF BELOW NO 2 INTAKE NR THREE RIVERS																									
10/16/74	5050	14:0C	9.2	7.6	--	--	--	--	--	--	--	0.5 B	--	--	--	--	--	--	--	--	--				
0820	5050	82										4	5	4											
04/23/75	5050	47.0F	12.0	7.4	--	--	--	--	--	--	--	0.9 R	2	--	--	--	--	--	--	--	--				
0900	5050	54										--	--	--											
08/06/75	5050	21:5C	8.1	7.2	--	--	--	--	--	--	--	0.7 B	1	--	--	--	--	--	--	--	--				
0830	5050	81										--	--	--											
C2 4201.50 KAWeah RIVER SOUTH FORK ABOVE GROUSE CREEK																									
10/16/74	5050	18:3C	9.0	7.7	--	--	--	--	--	--	--	0.7 R	--	--	--	--	--	--	--	--	--				
1115	5050	140										10	5	4											
04/23/75	5050	50.0F	11.0	7.5	--	--	--	--	--	--	--	0.8 R	2	--	--	--	--	--	--	--	--				
1150	5050	98										--	--	--											
08/06/75	5050	27:0C	8.2	8.0	--	--	--	--	--	--	--	0.4 B	1	--	--	--	--	--	--	--	--				
1130	5050	110										--	--	--											

TABLE D-4 (Cont'd)
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO 0.4 ^o H ₄	F-PH L-PH	DISCH MBS	DEPTH TURB	T.L. CHLDH	SET 5					TOC DOC	IODIDE T DOOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT	
								O ² ML/L	BOD MG/L	SUS S	V SUS S	CYANIDE PPM						
C3 1929.30 TULE RIVER BELOW SPRINGVILLE																		
10/30/74 1140	5650 5650	17.7C 275	12.1	8.3	--	--	--	--	1.9	C	--	--	--	--	--	--	--	--
04/09/75 1100	5650 5650	10.2C 130	11.2	8.2	--	--	--	--	1.2	R	3	--	--	--	--	--	--	--
08/20/75 1200	5650 5650	24.5C 300	9.2	8.0	--	--	--	--	2.1	R	4	--	--	--	--	--	--	--
C3 2140.10 TULE RIVER NORTH FORK AT BEAR CREEK ROAD																		
10/30/74 0945	5650 5650	17.5C 271	10.0	7.7	--	--	--	--	1.2	C	--	--	--	--	--	--	--	--
04/09/75 0920	5650 5650	8.5C 62	11.1	7.4	--	--	--	--	1.7	R	3	--	--	--	--	--	--	--
08/20/75 1100	5650 5650	24.5C 260	8.0	7.2	--	--	--	--	1.7	B	5	--	--	--	--	--	--	--
C3 3200.00 TULE RIVER SOUTH FORK OF MIDDLE FORK NEAR SPRINGVILL																		
10/30/74 0800	5650 5650	8.2C 232	10.3	8.2	--	--	--	--	1.4	C	--	--	--	--	--	--	--	--
04/09/75 0800	5650 5650	4.7C 180	12.1	8.2	--	--	--	--	1.8	R	3	--	--	--	--	--	--	--
08/20/75 0830	5650 5650	15.5C 215	8.1	8.2	--	--	--	--	0.8	B	3	--	--	--	--	--	--	--
C3 4149.30 TULE RIVER SOUTH FORK ABOVE CREEK CREEK																		
10/30/74 1340	5650 5650	15.0C 146	9.6	7.7	--	--	--	--	2.7	C	--	--	--	--	--	--	--	--
04/09/75 1200	5650 5650	11.2C 98	10.8	7.6	--	--	--	--	1.4	A	4	--	--	--	--	--	--	--
08/20/75 1300	5650 5650	27.5C 155	8.1	8.1	--	--	--	--	1.0	B	2	--	--	--	--	--	--	--
CS 1220.10 KERN RIVER AT MIRACLE HOT SPRINGS																		
10/02/74 1000	5650 5650	8.6	7.4	--	--	--	--	--	1.2	B	--	--	--	--	--	--	--	--
07/23/75 1130	5650 5650	21.0C 90	8.2	7.5	--	--	--	--	1.6	R	2	--	--	--	--	--	--	--
CS 1500.00 KERN RIVER AT KERNVILLE																		
10/02/74 0745	5650 5650	8.7	7.5	--	--	--	--	--	1.6	B	--	--	--	--	--	--	--	--
07/23/75 0930	5650 5650	19.5C 75	8.6	7.6	--	--	--	--	0.6	R	1	--	--	--	--	--	--	--
CS 1660.10 KERN RIVER ABOVE FAIRVIEW																		
10/02/74 0630	5650 5650	6.3	7.6	--	--	--	--	--	0.5	B	--	--	--	--	--	--	--	--
07/23/75 0800	5650 5650	14.5C 65	8.1	7.4	--	--	--	--	1.8	A	0	--	--	--	--	--	--	--
CS 3110.10 KERN RIVER SOUTH FORK NEAR WEDDON																		
10/02/74 0915	5650 5650	8.4	8.1	--	--	--	--	--	6.1	B	--	--	--	--	--	--	--	--
HO 7020.00	SAN JOAQUIN RIVER NEAR VERNALIS																	
10/02/74 1035	5650 5650	19.5C 345	6.9	7.6	--	3	--	--	--	26	5	7	--	--	--	--	--	--
10/16/74	5601 1030	19.5C 5600	7.3	7.6	2700	3	--	--	--	35	5	12	--	--	--	--	--	--
10/17/74	5650 0800	04.5C 5550	7.0	7.2	--	--	--	--	--	4.2	B	5	--	--	--	--	--	--
11/06/74	5601 1425	14.5C 330	6.7	7.3	4500	3	--	--	--	28	5	4	--	--	--	--	--	--
11/18/74	5601 1320	14.5C 5600	8.9	7.3	3670	3	--	--	--	20	5	2	--	--	--	--	--	--
11/21/74	5601 0900	14.5C 310	8.8	7.3	--	--	--	--	--	2.0	B	6	--	--	--	--	--	--
12/17/74	5601 1300	17.5C 375	10.1	7.6	4510	3	--	--	--	26	5	4	--	--	--	--	--	--
12/19/74	5650 0900	10.0C 358	8.7	7.2	--	--	--	--	--	2.0	B	6	--	--	--	--	--	--

TABLE D-4 (Cont'd)
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LA8	TEMP EC	DO G.M.	F=PM L=PH	015CH MBAS	DEPTH T+L	O+Q TURB	ML/L COLOR MG/L	SET 5			800 SU5	COD V SU5	CYANIDE PHENOLS	TOC DOC	IODIDE T DOOR	BROMIDE SULFITE	T O SULF	CC CA EXT
									800 SU5	COD V SU5	CYANIDE PHENOLS								
AO 7020.00 SAN JOAQUIN RIVER NEAR VERNALIS																			
01/21/75	5001	10	C	9.8	7.5	2750	3	--	--	--	--	32	5	12	--	--	--	--	
1600	5050	645		12.56		--													
02/03/75	5001	11	C	9.9		3320	3	--	--	--	--	40	5	5	--	--	--	--	
1450	5050	633		13.27		--													
03/18/75	5001	12	C	9.7	7.6	6420	3	--	--	--	--	48	5	5	--	--	--	--	
1115	5050	468		13.58		--													
04/01/75	5001	12	C	9.7	7.6	6440	3	--	--	--	--	57	5	7	--	--	--	--	
1240	5050	398		16.46		--													
04/18/75	5001	16	C	9.4	7.4	3380	3	--	--	--	--	38	5	5	--	--	--	--	
1410	5050	633		13.22		--													
05/01/75	5001	19	C	8.9	7.8	2510	3	--	--	--	--	56	5	12	--	--	--	--	
1335	5050	702		12.14		--													
05/15/75	5001	18	C	9.5	7.8	3870	3	--	--	--	--	61	5	8	--	--	--	--	
1210	5050	405		13.79		--													
06/03/75	5001	19	C	8.9	7.3	6670	3	--	--	--	--	47	5	5	--	--	--	--	
1700	5050	198		16.61		--													
06/17/75	5001	19	C	8.7	7.6	7930	3	--	--	--	--	58	5	7	--	--	--	--	
1615	5050	140		17.69		--													
06/25/75	5050	19	C	8.2	7.8	2730	3	--	--	--	--	13	F	--	--	--	--	--	
1010	5050	531		12.66		--													
06/29/75	5050	19	C	8.2	7.8	2730	3	--	--	--	--	80	5	16	--	--	--	--	
1011	5001	531		12.66		--													
07/01/75	5001	21	C	9.8	8.2	2770	3	--	--	--	--	86	5	12	--	--	--	--	
1535	5050	736		11.81		--													
07/15/75	5001	29	C	8.7	8.2	1560	3	--	--	--	--	156	5	19	--	--	--	--	
1514	5050	778		10.98		--													
07/23/75	5001	26	C	7.4	7.4	--	3	--	--	--	--	164	5	25	--	--	--	--	
1035	5001	865		7.4		--													
08/12/75	5001	26	C	9.4	7.2	1520	3	--	--	--	--	118	5	19	--	--	--	--	
1615	5050	733		10.76		--													
08/26/75	5001	25	C	7.3	7.7	1790	3	--	--	--	--	107	5	12	--	--	--	--	
1200	5050	685		11.14		--													
09/11/75	5001	22	C	7.9	7.8	2530	3	--	--	--	--	73	5	8	--	--	--	--	
1410	5050	471		12.16		--													
09/25/75	5001	23	C	7.4	7.8	3050	3	--	--	--	--	74	5	19	--	--	--	--	
1330	5050	379		12.81		--													
09/30/75	5050	19	C	8.1	7.8	--	3	--	--	--	--	49	5	15	--	--	--	--	
1314	5001	386		55.63		--													

CONTINUED

TABLE D-5
NUTRIENT CONSTITUENTS OF SURFACE WATER

Abbreviations, Chemical Symbols, and Codes used
in this table are:

<u>Abbreviations</u>	
EC	Specific electrical conductance in micromhos at 25° Celsius
TURB	Turbidity in turbidity units C = Candle determination AF = Hach (field) determination
PH	Measure of acidity or alkalinity of water
D & DLS	Dissolved Concentration
T	Total Concentration
ORGN	Organic Nitrogen
NH ₃ + ORGN	Ammonia plus Organic Nitrogen as N (total Kjeldahl)
O-PO ₄	Orthophosphate as P
TOT P	Total Phosphate as P
REM	Remarks

Chemical Symbols

NO ₂	Nitrite as N
NO ₃	Nitrate as N
NH ₃	Ammonia as N
CACO ₃ T	Total Alkalinity (Bicarbonate)

Sampler (SAMP) and Laboratory (LAB) Codes

5050 Department of Water Resources

TABLE D-5
NUTRIENT ANALYSIS OF SURFACE WATER

DATE	TIME	SAHP	LAB	O.M.	TEMP	F-PH	F-EC	DEPTH	TURB	CATION P	D NO2 + NO3	D NO2	D OPO4	D N	D DIS	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER		
																CACO3	T	NH3
80 0109+30 WESTLEY WASTEWAY																		
06/25/75	5:50	0945	5001	18	C	458		73		--	--	0.99	1.30	0.90	--	--	0.18	0.51
80 0349+10 NEWMAN WASTEWAY																		
06/24/75	5:50	103n	5001	19	C	35C			214	--	--	0.30	1.70	0.70	1.30	--	0.27	0.49
09/30/75	5:50	1005	5001	20	C	7.6	1290	17AF	274	--	--	.17	1.5	1.27	1.44	--	.19	--
80 0470+00 SALT SLUGH NR STEVENSON																		
06/24/75	5:50	0945	5001	20	C	993				--	--	0.15	1.34	0.90	1.00	--	0.06	0.35
07/22/75	5:50	095n	5001	28	C	7.8	867	30AF	11d	--	--	0.21	1.25	1.49	2.37	2.58	0.08	--
08/20/75	5:50	1100	5001	23	C	7.3	1100	1090		--	--	--	1.7	--	--	0.14	--	
80 0936+30 BURKHARD DRAIN																		
06/25/75	5:50	1205	5001							--	--	0.07	2.70	0.46	0.50	--	0.14	0.46
80 3115+00 STANISLAUS RIVER AT KOETITZ RANCH																		
06/25/75	5:50	1205	5001							--	--	0.04	0.55	0.06	0.20	0.09	0.05	--
07/23/75	5:50	111n	5001	24	C	7.5	197	7AF	70	--	--	.01	.96	.19	.43	.44	.05	.11
80 3185+00 STANISLAUS RIVER AT KNIGHTS FERRY																		
06/18/75	5:50	1600	5001	17	C	8.1	28			--	0.02	0.00	--	--	--	--	--	--
09/17/75	5:50	1700	5001	23	C	7.8	65			--	--	0.00	--	--	--	--	--	0.01
80 4105+00 TUOLUMNE RIVER AT TUOLUMNE CITY																		
06/25/75	5:50	1125	5001	20	C	6C	530	86		--	--	0.01	0.88	0.40	0.30	--	0.06	0.15
07/23/75	5:50	1005	5001	24	C	7.5	563	8AF	96	--	--	.01	.99	.49	.85	.86	.17	--
80 4175+00 TUOLUMNE RIVER AT LA GRANGE BRIDGE																		
06/04/75	5:50	1300	5001	21	C	7.1	50			--	0.03	0.00	--	--	--	--	--	--
09/24/75	5:50	1400	5001	13	C	6.8	32			--	--	0.09	0.00	--	--	--	--	--
80 4921+30 TURLOCK SEWAGE TREATMENT PLANT																		
06/24/75	5:50	1255	5001	21	C	6AS				--	--	1.70	3.30	5.90	6.00	--	4.00	6.60
09/30/75	5:50	1345	5001	23	C	8.8	740	17AF	248	--	--	6.80	.52	2.20	.80	14.8	4.50	--
80 4942+30 MODESTO SEWAGE TREATMENT PLANT																		
06/24/75	5:50	1405	5001	22	C	32C				--	--	5.8	--	5.20	11.0	--	--	--
09/30/75	5:50	1455	5001	25	C	7.4	1510	128AF	343	--	--	3.3	.17	4.7	8.3	11.6	.18	--
80 4974+30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 2																		
06/25/75	5:50	1035	5001	17	C	7C				--	--	0.01	1.18	0.04	0.20	--	0.02	0.03
80 4975+30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 5																		
06/24/75	5:50	1500	5001	21	C	7C	369	99		--	--	--	--	--	0.90	--	--	0.37
09/30/75	5:50	1545	5001	21	C	8.0	522	11AF	136	--	--	.61	3.20	.59	.69	1.30	.95	.70
80 4976+30 TURLOCK IRRIGATION DISTRICT LATERAL DRAIN NO 6 AND 7																		
06/24/75	5:50	1155	5001	19	C	7.8	317	4C	103	--	--	0.05	2.00	0.16	0.80	--	0.19	0.26
09/30/75	5:50	125n	5001	21	C	7.8	401	10AF	92	--	--	.05	2.60	.45	.63	.68	.10	.17
80 5131+00 MERCED RIVER AT MILLIKEN BRIDGE																		
06/24/75	5:50	0900	5001	18	C	6.9	78	5C		--	--	0.05	0.26	0.08	0.20	--	0.03	0.08
07/22/75	5:50	0910	5001	29	C	7.2	150	4AF	47	--	--	.06	1.60	.54	.62	.68	.05	.08
80 5166+50 CANAL CREEK AT OAKDALE ROAD																		
02/05/75	5:50	173n	5001	10	C	7.3	45			--	--	--	0.21	--	2.9	--	--	0.53
03/12/75	5:50	153n	5001	15	C	7.2	55			--	--	--	0.04	--	1.0	--	--	0.21
04/16/75	5:50	163n	5001	12	C	7.8	50			--	--	--	0.05	--	0.2	--	--	0.06

TABLE D-5 (Cont'd)
NUTRIENT ANALYSIS OF SURFACE WATER

DATE	SAMPLE	G.M.	TEMP	F-PM	F-EC	FIELD	TURB	CACO3 P	O NO2 + NO3	O NO2	O (NH3 +	O15	O-Po4	O TOT P	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER											
<hr/>																										
						OUTCHAN CREEK AT BAXTER ROAD																				
02/05/75	5050	4:10	9	C	7.2	90			--	--	0.58	--	1.8	--	--	--	--	0.22								
04/16/75	5050																									
03/12/75	5050																									
0720	5050																	0.10								
04/16/75	5050	3:77	12:00	A,3		212			--	--	0.63	--	0.7	--	--	--	--	0.07								
	0755	5050																								
						DEADMAN CREEK AT BAXTER ROAD																				
02/05/75	5050	4:50	9	C	7.2	70			--	--	0.79	--	1.4	--	--	--	--	0.19								
0705	5050																									
03/12/75	5050																	0.06								
0800	5050	11:48	11:48	C	7.5	126			--	--	0.21	--	0.8	--	--	--	--									
04/16/75	5050	3:08	12:55	C	7.9	172			--	--	0.62	--	0.5	--	--	--	--	0.06								
	0815	5050																								
						BO 6365.50 SAN JOAQUIN RIVER NEAR VERNALIS																				
10/02/74	5001	19	C	7.6		345	1AF		--	--	0.00	0.0	--	--	0.07	--		0.16								
1035	5001	3									0.66	0.64	0.46	--												
10/16/74	5001	12:37	19	C	7.6	500	2AF		--	--	0.67	0.7	--	--	0.10	--		0.23								
1030	5001	2700									0.03	0.84	1.13	1.16	--											
11/06/74	5001	14:49	14	C	7.3	330	16AF		--	--	0.53	0.6	0.74	--	0.06	--		0.11								
1425	5001	4500									0.07	0.66	0.67	0.74	--											
11/18/74	5001	13:57	15	C	7.3	440	10AF		--	--	0.71	0.8	--	--	0.08	--		0.13								
1320	5001	3670									0.09	0.52	0.85	0.94	--											
12/17/74	5001	14:02	12	C	7.6	375	9AF		--	--	0.23	0.3	--	--	0.07	--		0.11								
1300	5001	4510									0.07	0.47	0.31	0.38	--											
12/19/74	5050	12:07	10:00	C	7.2	358			--	--	0.57	--	--	--	--	--	--									
0900	5050																									
01/21/75	5001	12:56	10	C	7.5	645	8AF		--	--	0.38	0.5	--	--	0.04	--		0.17								
1600	5001	2750									0.12	0.95	0.56	0.62	--											
02/03/75	5001	13:27	11	C	7.3	633	16AF		--	--	0.66	0.8	--	--	0.08	--		0.19								
1450	5001	3325									0.14	0.76	0.90	1.04	--											
03/18/75	5001	16:28	13	C	7.6	408	22AF	64	--	--	0.72	0.01	0.4	--	0.09	--		0.15								
1115	5001	4250									0.05	0.71	0.5	0.55	--											
04/01/75	5001	16:40	13	C	7.6	398	25AF	62	--	--	0.71	0.01	0.5	--	0.05	--		0.14								
1240	5001	6440									0.03	0.70	0.6	0.63	--											
04/18/75	5001	13:22	15	C	7.4	633	26AF	9n	1+	0.02	0.02	0.3	--	--	0.10	--		0.18								
1410	5001	3380									0.02	0.98	0.7	0.72	--											
05/01/75	5001	12:14	19	C	7.8	702	32AF	103	1.02	0.02	0.7	--	--	--	0.13	--		0.22								
1335	5001	2510									0.10	1.0	0.9	1.0	--											
05/15/75	5001	13:29	18	C	7.8	405	19AF	68	--	--	0.47	0.02	0.4	--	0.08	--		0.15								
121n	5001	3870									0.00	0.45	0.5	0.5	--											
06/03/75	5001	16:61	19	C	7.3	198	18AF	36	--	--	0.94	0.00	0.4	--	0.06	--		0.15								
1700	5001	6670									0.00	0.94	0.5	0.5	--											
06/17/75	5001	17:69	19	C	7.6	140	17AF	30	--	--	0.32	0.00	0.3	--	0.05	--		0.10								
1615	5001	7930									0.00	0.32	0.3	0.3	--											
06/25/75	5050	19	C	7.8		531	38AF	82	--	--	0.78	0.83	0.86	--	0.08	--		0.26								
1010	5001	2930									0.03	0.78	0.83	0.86	--											
07/01/75	5001	21	C	6.2		736	32AF	119	1.22	0.02	0.5	--	--	0.09	--		0.27									
1535	5001	3							0.00	1.2	1.0	1.0	1.0	--												
07/15/75	5001	10:43	22	C	8.2	778	50AF		1.11	0.01	0.2	--	--	0.09	--		0.29									
1510	5001	5001							0.00	1.1	1.2	1.2	1.2	--												
07/23/75	5050	25	C	7.4		865	54AF	108	--	--	0.64	--	--	0.11	--		0.32									
1035	5001	3							0.06	1.30	1.46	1.52	1.52	--												
08/12/75	5001	26:00	72	C	7.2	733	48AF		1.33	0.03	0.8	--	--	0.12	--		0.12									
1615	5001	3							0.03	1.3	1.0	1.0	1.03	--												
08/26/75	5001	11:14	25	C	7.7	685	31AF		1.22	0.02	0.6	--	--	0.07	--		0.24									
1200	5001	1790							0.01	1.2	1.0	1.0	1.01	--												
09/11/75	5001	12:16	22	C	7.8	471	19AF		0.92	0.01	0.6	--	--	0.06	--		0.13									
1410	5001	2530							0.00	0.91	0.7	0.7	0.7	--												
09/25/75	5001	12:01	23	C	7.8	379	19AF		0.7	0.01	0.4	--	--	0.06	--		0.26									
1330	5001	3650							0.00	0.69	0.4	0.4	0.4	--												
						BO 7040.00 SAN JOAQUIN RIVER AT HAZE ROAD BRIDGE																				
06/25/75	5050	19	C			526	34C	92	--	--	0.82	0.64	0.30	--	0.10	--	0.28									
0805	5001	3							0.03	1.45	1.85	1.88	1.88	--	0.13	--										
07/23/75	5050	24	C	7.7		982	60AF	148	--	--	1.30	1.42	1.52	--	0.14	--	.36									
0905	5001	3							0.10	1.30	1.42	1.52	1.52	--												
						BO 7080.00 SAN JOAQUIN RIVER NEAR ORATSON																				
06/25/75	5050	19	C						--	--	0.56	0.50	--	--	0.11	--										
0845	5001	3							0.02	0.82	0.66	0.50	--													
07/23/75	5050	24	C	7.7					--	--	1.50	--	--	--												
0905	5001	3							0.10	1.30	1.42	1.52	1.52	--												
						BO 7200.00 SAN JOAQUIN RIVER AT PATTERSON BRIDGE																				
06/24/75	5050	20	C			494	26C	79	--	--	0.64	0.66	0.48	0.50	--	0.09	--	0.25								
1230	5001	3							0.04	0.66	0.48	0.50	--													
07/22/75	5050	28	C	8.1		756	54AF	108	--	--	1.00	1.00	1.98	--	0.13	--	.33									
1220	5001	3							0.02	1.40	1.60	1.98	--													

TABLE D-5 (Cont'd)
NUTRIENT ANALYSIS OF SURFACE WATER

DATE	TIME	SAMP	G+H	TEMP	F+PM	FIELD	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER						
							F=EC	TURM	CACO3 P	O NO2 + NO3 D	O ORG N D (NM3 + O15)	O PO4	O TOI P
on 7250.00 SAN JOAQUIN RIVER AT CROWS LANDING BRIDGE													
06/24/75	11:45	550	114n	5501	20	C	464	29C	--	--	0.40	0.44	0.40
									0.03				
07/22/75	11:45	5.50	114n	5n01	28	C	8.1	706	5NAF	--	0.92	1.19	--
					3				0.01		1.99	2.00	
on 7375.00 SAN JOAQUIN RIVER AT FREMONT FORK BRIDGE													
05/21/75	13:15	5:50	1315	5:50	20	C	8.0	900	1040	--	0.25	--	--
									0.03				
06/24/75	10:35	5:50	1035	5n01	21	C	1145	35C	--	--	0.75	1.54	0.90
									0.03				
07/22/75	10:35	5.50	1230	5n01	26	C	7.9	813	3RAF	108	--	1.52	--
					2				0.08		2.66	2.74	
08/20/75	11:30	5:50	113n	5:50	24	C	7.4	1000	976	--	0.71	--	--
									0.01				
on 7886.50 SAN JOAQUIN RIVER AT NORTH FORK ROAD BRIDGE													
10/08/74	06:15	5:50	9:5C	6:8	30	--	--	--	0.06	--	0.2	--	0.00
									0.03				0.05
07/09/75	07:00	5:50	11:5C	6:8	30	--	--	0.05	0.00	--	0.4	--	--
									0.05				0.08
B3 1400.50 STANISLAUS RIVER AT PARROTS FERRY BRIDGE													
06/18/75	11:30	5:50	1315	5:50	13+	C	8.3	25	--	0.02	0.00	--	--
									0.02		0.2	--	0.04
09/17/75	12:30	5:50	1230	5:50	16+	C	7.3	35	--	0.01	0.00	--	--
									0.01		0.1	--	0.02
B3 2110.10 STANISLAUS RIVER NF AT CALAVERAS BIG TREES STATE PARK													
06/18/75	13:30	5:50	12+	5:50	12+	nC	6.8	18	--	0.02	0.00	--	--
									0.02		0.1	--	0.18
09/17/75	14:00	5:50	14:00	5:50	19+	nC	7.2	28	--	0.01	0.00	--	--
									0.01		0.1	--	0.01
B3 3255.00 STANISLAUS RIVER MIDDLE FORK AT REAROSLEY													
06/18/75	09:00	5:50	9:5C	8.3	25	--	--	0.04	0.00	--	0.2	--	--
									0.04				0.06
09/17/75	09:30	5:50	9:30n	5:50	16+	nC	7.2	35	--	0.01	0.00	--	--
									0.01		0.1	--	0.13
B3 3480.10 STANISLAUS RIVER MIDDLE FORK AT DAWDANELLE													
06/18/75	06:30	5:50	4:9C	8.1	20	--	--	0.07	0.00	--	0.7	--	--
									0.07		0.2	--	0.16
09/17/75	08:00	5:50	14:5C	7.0	20	--	--	0*	0.00	--	0.2	--	--
									0*				0.02
B4 1231.50 SULLIVAN CREEK AT JACKSONVILLE ROAD													
04/23/75	10:30	5:50	11:5C	7.2	90	--	--	0.01	0.00	--	0.2	--	0.00
									0.01				0.02
B4 1232.50 WOODS CREEK AT SLATE CREEK													
04/23/75	10:00	5:50	13:5C	8.4	220	--	--	0.47	0.02	--	0.45	--	0.26
									0.47		0.3	--	0.28
B4 1235.50 WOODS CREEK BELOW JAMESTOWN STP													
04/23/75	09:30	5:50	11:3C	8.2	220	--	--	0.69	0.04	--	0.65	--	0.31
									0.69		0.4		0.35
B4 1238.50 WOODS CREEK BELOW SONORA STA													
04/23/75	08:00	5:50	11:5C	8.1	247	--	--	0.51	0.07	--	1.7	--	0.65
									0.51				0.65
B4 1239.50 WOODS CREEK AT COUNTY FAIRGROUNDS													
04/23/75	07:30	5:50	11:1C	8.2	260	--	--	0.29	0.00	--	0.1	--	0.00
									0.29				0.02
B4 1241.50 WOODS CREEK AT JACK PAGE ROAD ABOVE SONORA													
04/23/75	06:15	5:50	3:2	5:50	8.0	212	--	--	0.1	0.00	--	0.1	--
									0.1				0.01
B4 1290.10 TUOLUMNE RIVER AT WARDS FERRY BRIDGE													
06/04/75	11:00	5:50	11:7C	6:8	12	--	--	0.01	0.00	--	0.1	--	0.04
									0.01				
09/24/75	12:30	5:50	27:5C	7:4	50	--	--	0.02	0.00	--	0.5	--	0.02
									0.02				
B4 1680.00 TUOLUMNE RIVER ABOVE EARLY INTAKE													
06/04/75	09:00	5:50	9:5C	6:8	10	--	--	0.02	0.00	--	0.2	--	0.02
									0.02				
09/24/75	09:30	5:50	13:5C	6:8	9	--	--	0.08	0.00	--	0.1	--	0.00
									0.08				
B4 1850.10 TUOLUMNE RIVER AT TUOLUMNE MEADOWS													
06/04/75	08:30	5:50	2:1C	6:8	4	--	--	0.03	0.00	--	0.1	--	0.00
									0.03				
09/24/75	07:00	5:50	9:5C	7:0	18	--	--	0.06	0.00	--	0.1	--	0.00
									0.06				

TABLE D-5 (Cont'd)
NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMPLE LAB	G.M. DISCH.	TEMP DEPTM	F-RM LAB	P-EC EC	FIELD TURB CACO3 F-CO2 CACO3 T	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER			
							D NO2 + NO3 D NO2 T NH3 D NO3	D ORG N T ORG N D ORG N A, M, PO4	DIS T ORG N T PO4 T PO4	D TOT P T TOT P P REM
85 R 735.7 016.2 1 LAKE MCCLURE NEAR MCCLURE POINT										
07/10/75 09/03/75	5050 5050		8.3 16.5C	50 18		-- 0.01	-- 0.01	-- --	-- --	0.00 0.01
09/03/75 10/03/75	5050 1000	1425	6.8 20.5C	47 7.0		-- --	0.01 0.36	-- --	-- --	0.01 0.03
85 R 736.2 006.1 1 LAKE MCCLURE AT INLET (HEAD)										
07/10/75 09/03/75	5050 5050		7.4 7.4	18		-- 0.01	-- 0.01	-- --	-- --	0.00 0.01
09/03/75 10/03/75	5050 1100	5050	20.5C 7.0	57		-- --	0.36 0.00	-- --	-- --	0.01 0.02
85 R 736.7 007.9 1 LAKE MCCLURE AT BAGBY										
07/10/75 09/03/75	5050 5050		8.3 6.6	36 50		-- --	0.01 0.03	-- --	-- --	0.00 0.01
09/03/75 10/03/75	5050 1400	5050	7.0 4.0			-- --	0.00 0.00	-- --	-- --	0.00 0.01
85 R 738.0 017.3 1 LAKE MCCLURE AT BARRETT COVE										
07/10/75 09/03/75	5050 5050		7.8 6.6	48		-- --	0.01 0.00	-- --	-- --	0.00 0.00
09/03/75 10/03/75	5050 1300	5050	7.0 3.7			-- --	0.00 0.00	-- --	-- --	0.00 0.01
85 R 740.5 013.8 1 LAKE MCCLURE AT LOWER HOUSESHOE BEND										
07/10/75 09/03/75	5050 5050		7.2 6.6	39		-- --	0.01 0.00	-- --	-- --	0.00 0.01
09/03/75 10/03/75	5050 1300	5050	6.9 3.9			-- --	0.00 0.00	-- --	-- --	0.00 0.01
85 R 741.6 016.1 1 LAKE MCCLURE AT UPPER HOUSESHOE BEND										
07/10/75 09/03/75	5050 5050		8.3 6.9	40		-- --	0.02 0.00	-- --	-- --	0.00 0.01
09/03/75 10/03/75	5050 1300	5050	6.9 3.9			-- --	0.00 0.00	-- --	-- --	0.01 0.01
85 1200.00 MERCED RIVER BELOW EXCHEQUER DAM										
09/03/75 08/06/75	5050 5050	2048	55.0C	7.5	29	-- 0.00	-- 0.07	-- --	-- --	0.00 0.01
85 1320.00 MERCED RIVER AT BAGBY										
11/13/74 11/13/74	5050 153n	5050	21.5C	7.1	63	-- --	-- 0.01	-- 0.1	-- --	0.01 0.02
85 1410.10 MERCED RIVER ABOVE BRICEBURG										
11/13/74 11/13/74	5050 153n	5050	10.0C	7.3	40	-- --	-- 0.05	-- 0.0	-- --	0.01 0.01
85 1517.10 MERCED RIVER BELOW EL PORTAL										
11/13/74 11/13/74	5050 153n	5050	8.6C	7.3	37	-- --	-- 0.21	-- 0.0	-- --	0.02 0.06
85 1519.50 MERCED RIVER AT JUNCTION BIG OAK FLAT RD AND HWY 140										
11/13/74 09/30	5050 5050		7.2C	6.8	30	-- --	-- 0.31	-- 0.0	-- --	0.02 0.03
85 1700.00 MERCED RIVER AT HAPPY ISLES BRIDGE NEAR YOSEMITE										
11/13/74 07/15	5050 5050	0715	1.37 4.8C	7.0	23	-- --	-- 0.03	-- 0.0	-- --	0.00 0.01
85 5152.10 BEAR CREEK ABOVE BEAR CREEK RESERVOIR										
02/05/75 11/05/75	5050 1445	5050	9.4C	7.5	75	-- --	-- 0.35	-- 0.5	-- --	-- 0.09
03/12/75 11/05/75	5050 1100	5050	11.4C	8.0	132	-- --	-- 0.04	-- 0.3	-- --	-- 0.03
04/16/75 143n	5050 5050	15	15.5C	7.9	185	-- --	-- 0.03	-- 0.2	-- --	-- 0.04
85 6152.50 BURNS CREEK AT MERCED MARIPOSA COUNTY LINE										
02/05/75 10/25	5050	50 E	11.4C	7.5	105	-- --	-- 0.89	-- 0.6	-- --	-- 0.07
03/12/75 09/24	5050 5050	35+1	10.7C	7.4	156	-- --	-- 0.20	-- 0.5	-- --	-- 0.04
04/16/75 143n	5050 5050	15	12.0C	8.0	205	-- --	-- 0.05	-- 0.3	-- --	-- 0.03
86 2020.10 OWENS CREEK ABOVE OWENS RESERVOIR										
02/05/75 12/25	5050 5050	75 E	10.0C	7.8	115	-- --	-- 0.58	-- 0.8	-- --	-- 0.17
03/12/75 09/24	5050 5050	12+2	11 C	R+2	210	-- --	-- 0.08	-- 0.6	-- --	-- 0.07
04/16/75 12/25	5050 5050	15+n	11.3	249		-- --	-- 0.04	-- 0.4	-- --	-- 0.07

TABLE D-5 (Cont'd)
NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMPLE LAB	G.P. DISCH ^a	TEMP DEPTH	F-PH LAO EC	F-EC F-CO ₂	TURB CACO ₃ T	FIELD P D NO ₂ D NH ₃	NUTRIENT CONSTITUENTS D ORG N D ORG N D O ₂ D O ₂ -PO ₄ D PO ₄ T TOT P T TOT P REH	IN MILLIGRAMS PER LITER				
									D NO ₂	D NH ₃	D ORG N	D O ₂	
B6 2204+10 MARIPOSA CREEK ABOVE MARIPOSA RESERVOIR													
02/05/75 5:50 104n 5:50	200 E	8.5C	7.4	60	--	--	0.49	--	0.4	--	--	--	0.09
03/12/75 5:50 110n 5:50	121	8.2	121	--	--	--	0.15	--	0.3	--	--	--	0.04
04/16/75 5:50 1200 5:50	12.0C	8.2	135	--	--	--	0.12	--	0.3	--	--	--	0.07
B7 1340+00 SAN JOAQUIN RIVER ABOVE KILLOW CREEK NEAR AUBREY													
10/08/74 5:50 083n 5:50	9.7C	6.8	22	--	--	--	0.03	--	0.1	--	--	0.00	--
07/09/75 5:50 093n 5:50	12.5C	6.8	15	--	0.03	0.00	--	--	0.1	--	--	--	0.00
B7 1532.50 SAN JOAQUIN RIVER BELOW SHAKELAT CREEK													
10/08/74 5:50 1245 5:50	18.5C	7.3	50	--	--	0.04	--	0.1	--	--	0.00	--	0.01
07/09/75 5:50 123n 5:50	13.0C	6.1	15	--	0.02	0.00	--	--	0.2	--	--	--	0.00
B7 4250.50 SAN JOAQUIN RIVER SOUTH FORK AT MONO HOT SPRINGS													
10/20/74 5:50 120n 5:50	8.5C	6.9	20	--	--	0.00	--	0.1	--	--	0.00	--	0.01
07/08/75 5:50 093n 5:50	17.5C	6.8	25	--	0.01	0.00	--	--	0.1	--	--	--	0.00
Cn 2550+30 KAWeah RIVER AT LEMONCOVE													
10/16/74 5:50 143n 5:50	21.1C	7.5	120	--	--	0.06	--	0.2	--	--	0.01	--	0.02
04/23/75 5:50 1440 5:50	57.0F	112	--	0.02	0.00	--	--	0.3	--	--	--	--	0.04
08/05/75 5:50 1400 5:50	23.5C	7.1	50	--	0.02	0.00	--	--	0.3	--	--	--	0.05
Cn 3195.00 TULE RIVER AT WORTH BRIDGE NEAR PORTERVILLE													
10/20/74 5:50 150n 5:50	18.0C	7.7	232	--	--	0.37	--	0.6	--	--	0.05	--	0.10
04/09/75 5:50 132n 5:50	13.5C	7.8	180	--	0.01	0.00	--	--	0.3	--	--	--	0.04
08/20/75 5:50 143n 5:50	24.5C	7.0	145	--	0.04	0.01	--	--	0.6	--	--	--	0.08
Cn 5160+10 KERN RIVER AT HART PARK													
10/02/74 5:50 130n 5:50	7.7	--	--	--	0.17	--	0.2	--	--	0.02	--	0.06	
07/23/75 5:50 1400 5:50	23.5C	7.4	97	--	0.2	0.03	--	--	0.4	--	--	--	0.06
Cn 5160+10 KERN RIVER AT RANCHERIA BRIDGE													
10/02/74 5:50 1200 5:50	7.7	--	--	--	0.17	--	0.2	--	--	0.02	--	0.03	
07/23/75 5:50 133n 5:50	23.5C	7.5	93	--	0.23	0.03	--	--	0.3	--	--	--	0.04
C1 1115.50 KINGS RIVER NEAR PIEDRA													
10/23/74 5:50 1445 5:50	16.5C	7.2	25	--	--	0.02	--	0.2	--	--	0.01	--	0.02
05/07/75 5:50 110n 5:50	11.5C	8.4	30	--	0.02	0.00	--	--	0.1	--	--	--	0.00
C1 1320+00 BIG CREEK ABOVE PINE FLAT RESERVOIR													
10/23/74 5:50 133n 5:50	1.38	19.5C	7.9	130	--	0.00	--	0.1	--	--	0.00	--	0.04
05/07/75 5:50 153n 5:50	2.86	13.5C	50	--	0.02	0.00	--	--	0.1	--	--	--	0.03
C1 1460+00 KINGS RIVER BELOW NORTH FORK													
10/23/74 5:50 1215 5:50	15.5C	7.3	45	--	--	0.00	--	0.1	--	--	0.01	--	0.02
05/07/75 5:50 134n 5:50	5.26	12.5C	7.2	30	--	0.01	0.00	--	0.1	--	--	--	0.09
C1 4115.30 KINGS RIVER SOUTH FORK AT CEDAR GROVE													
10/23/74 5:50 033n 5:50	7.1C	7.3	34	--	--	0.00	--	0.1	--	--	0.00	--	0.01
05/07/75 5:50 073n 5:50	5.70	5.7C	7.6	22	--	0.02	0.00	--	0.1	--	--	--	0.00
C2 1210+30 KAWeah RIVER ABOVE LAKE KAWeah													
10/16/74 5:50 1245 5:50	20.0C	7.6	125	--	--	0.02	--	0.1	--	--	0.00	--	0.01
04/23/75 5:50 1300 5:50	57.0F	7.5	--	0+	0.00	--	0.2	--	--	--	--	--	0.01
08/06/75 5:50 1300 5:50	25.5C	7.8	60	0+	0.00	--	0.1	--	--	--	--	--	0.01

TABLE D-5 (Cont'd)
NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMPLE LAB	G.M. DISCH.	TEMP F-PM	F-EC	TURB LAB	CACO ₃ F-CO ₂	P CACO ₃ T	FIELD						NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER							
								O NO ₂	N O ₃	D N O ₂	D O ₂	ORG N	D (NH ₃ + T NH ₃)	D O ₂ -PO ₄	O TOT P	DIS	T ORG N	T D O ₂ N	A, M, PO ₄	T O ₂ -PO ₄	T TOT P
C2 2010.30 KAWeah RIVER NORTH FORK NEAR MOUTH																					
10/16/74 0950	5650 5650		15.7C 7.6		158			--	--	--	--	0.2	--	--	0.00	--	--	--	0.02		
04/23/75 1015	5650 5650		53.0F 7.4		84			0.02	0.00	--	--	0.2	--	--	--	--	--	--	0.02		
08/06/75 0930	5650 5650		24.0C 7.6		118			0.	0.00	--	--	0.1	--	--	--	--	--	--	0.01		
C2 3147.00 KAWeah RIVER MF BELOW NO 2 INTAKE NR THREE RIVERS																					
10/16/74 0820	5650 5650		15.0C 7.6		82			--	--	0.01	--	0.0	--	--	0.00	--	--	--	0.01		
04/23/75 0900	5650 5650		47.0F 7.4		54			0.04	0.00	--	--	0.1	--	--	--	--	--	--	0.00		
08/06/75 0830	5650 5650		21.5C 7.2		52			0.05	0.00	--	--	0.1	--	--	--	--	--	--	0.01		
C2 4201.50 KAWeah RIVER SOUTH FORK ABOVE GROUSE CREEK																					
10/16/74 1115	5650 5650		16.3C 7.7		140			--	--	0.02	--	0.1	--	--	0.00	--	--	--	0.01		
04/23/75 1150	5650 5650		50.0F 7.5		98			0.02	0.00	--	--	0.2	--	--	--	--	--	--	0.01		
08/06/75 1130	5650 5650		22.0C 8.0		110			0.	0.00	--	--	0.1	--	--	--	--	--	--	0.01		
C3 1929.30 TULE RIVER BELOW SPRINGVILLE																					
10/30/74 1140	5650 5650		13.9C 8.3		275			--	--	0.14	--	0.4	--	--	0.02	--	--	--	0.08		
04/09/75 1100	5650 5650		10.2C 8.2		130			0.02	0.00	--	--	0.1	--	--	--	--	--	--	0.02		
08/20/75 1200	5650 5650	344	24.5C 8.0		300			0.02	0.00	--	--	0.3	--	--	--	--	--	--	0.03		
C3 2190.10 TULE RIVER NORTH FORK AT REAR CREEK ROAD																					
10/30/74 0845	5650 5650		12.0C 7.7		271			--	--	0.01	--	0.2	--	--	0.00	--	--	--	0.02		
04/09/75 0820	5650 5650		8.5C 7.4		62			0.09	0.00	--	--	0.1	--	--	--	--	--	--	0.01		
08/20/75 1000	5650 5650		23.0C 7.2		260			0.	0.00	--	--	0.4	--	--	--	--	--	--	0.04		
C3 3200.00 TULE RIVER SOUTH FORK OF MIDDLE FORK NEAR SPRINGVILLE																					
10/30/74 0800	5650 5650		2.50	8.2C 8.2	232			--	--	0.12	--	0.2	--	--	0.00	--	--	--	0.02		
04/09/75 0800	5650 5650		4.7C 8.2		160			0.	0.00	--	--	0.2	--	--	--	--	--	--	0.01		
08/20/75 0830	5650 5650		15.5C 8.2		215			0.	0.00	--	--	0.0	--	--	--	--	--	--	0.00		
C3 4149.30 TULE RIVER SOUTH FORK ABOVE CREW CREEK																					
10/30/74 1340	5650 5650		15.0C 7.7		140			--	--	0.22	--	0.4	--	--	0.02	--	--	--	0.06		
04/09/75 1200	5650 5650		11.2C 7.6		98			0.26	0.00	--	--	0.2	--	--	--	--	--	--	0.03		
08/20/75 1300	5650 5650		27.0C 8.1		155			0.01	0.00	--	--	0.2	--	--	--	--	--	--	0.04		
C5 1220.10 KERN RIVER AT MIRACLE HOT SPRINGS																					
10/02/74 1000	5650 5650		T.4					--	--	0.11	--	0.3	--	--	0.02	--	--	--	0.03		
07/23/75 1130	5650 5650		21.0	7.5	90			0.09	0.03	--	--	0.5	--	--	--	--	--	--	0.03		
C5 1500.00 KERN RIVER AT KERNVILLE																					
10/02/74 0745	5650 5650		7.5					--	--	0.03	--	0.2	--	--	0.01	--	--	--	0.07		
07/23/75 0930	5650 5650		19.0C 7.6		75			0.01	0.00	--	--	0.2	--	--	--	--	--	--	0.02		
C5 1660.10 KERN RIVER ABOVE FAIRVIEW																					
10/02/74 0830	5650 5650		7.6					--	--	0.00	--	0.0	--	--	0.01	--	--	--	0.01		
07/23/75 0800	5650 5650		16.5C 7.4		65			0.	0.00	--	--	0.2	--	--	--	--	--	--	0.04		
C5 3110.10 KERN RIVER SOUTH FORK NEAR WELDON																					
10/02/74 0915	5650 5650		8.1					--	--	0.02	--	0.4	--	--	0.13	--	--	--	0.24		

TABLE D-6
PESTICIDES IN SURFACE WATER

Abbreviations and Codes used in this table are:

Abbreviations

TIME	Pacific Standard Time on a 24-hour clock
TEMP	Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
EC	Specific electrical conductance in micromhos at 25° Celsius
DO	Dissolved oxygen content in milligrams per litre
PH	Measure of acidity or alkalinity of water
GH	Gage height in feet above an established datum
DEP	Depth in feet at which sample was collected
DISCHARGE	Instantaneous discharge in cubic feet per second

Pesticide Codes

Chlorinated Hydrocarbons

<u>Code</u>	<u>Most Common Name</u>
ATRAZSIMAZ	Atriazine and/or Simazine
CHLORDANE	Chlordane
DACTHAL	Dacthal, DCPA
UNKNOWNS	Complex chlorinated hydrocarbon compound mixture reported as DDT, one or more
NONE	
DETECTED	No detectable amount of Chlorinated Hydrocarbons

Organic Phosphorus

DIAZINON	Diazinon
UNKNOWNS	Complex organic phosphorus mixture reported as Parathion, one or more
NONE	
DETECTED	No detectable amount of Organic Phosphorus

Sampler (SAMP) and Laboratory (LAB) Codes

5001	U. S. Bureau of Reclamation
5050	Department of Water Resources

DATE TIME	SAMP LAB	TEMP EC	DO PH	G.H. DISCHARGE	PESTICIDES IN SURFACE WATER COMPOUNDS REPORTED IN MILLIGRAMS/LITER			OTHER
					CHLORINATED HYDROCARBON	ORGANIC PHOSPHORUS		
SALT SLOUGH NEAR STEVINSON BO 0470.00								
11/20/74 1200	5050 5050	13.0C 1200	8.0 7.6		.00003 DACTHAL		NONE DETECTED	
05/21/75 1230	5050 5050	17 C 1300	7.4		.0004 UNKNOWN		.000475 DIAZINON .00012 UNKNOWN	
08/20/75 1100	5050 5050	23.0C 1100			.00034 UNKNOWN		.00001 DIAZINON .00003 UNKNOWN	
TUOLUMNE RIVER AT TUOLUMNE CITY BO 4105.00								
05/28/75 1400	5050 5050	24.0C 400	7.5 7.3	24.10	NONE DETECTED		NONE DETECTED	
TUOLUMNE RIVER AT LA GRANGE BRIDGE BO 4175.00								
05/29/75 0830	5050 5050	11.0C 30	10.0 7.0		NONE DETECTED		.00002 UNKNOWN	
MERCED RIVER AT MILLIKEN BRIDGE BO 5131.00								
05/28/75 1200	5050 5050	21.0C 70	8.1 8.1		NONE DETECTED		.000055 UNKNOWN	
SAN JOAQUIN RIVER NEAR VERNALIS BO 7020.00								
11/21/74 0900	5050	13.0C 310	8.8 7.3	13.35	NONE DETECTED		NONE DETECTED	
01/21/75 1600	5001 5050	10 C 645	9.8 7.5	12.46	1 NONE	DETECTED		
05/01/75 1235	5001 5050	19 C 702	8.9 7.8	12.14 2510	1 NONE	DETECTED		
09/11/75 1410	5001 5050	22 C 471	7.9 7.8	12.16 2530	1 .00005	UNKNOWN		
SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE BO 7040.00								
05/28/75 1330	5050 5050	24.0C 500	9.0 7.9	17.53	.000025 DACTHAL		.00002 DIAZINON .00001 PARATHION	
SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE BO 7375.00								
11/20/74 1230	5050 5050	13.0C 1150	9.5 7.6		NONE DETECTED		NONE DETECTED	
05/21/75 1315	5050 5050	20 C 800	8.0		.00054 UNKNOWN		.00008 DIAZINON .00005 UNKNOWN	
STANISLAUS RIVER BELOW TULLOCH DAM B3 1158.10								
05/29/75 0630	5050 5050	13.0C 32	11.0 8.4		NONE DETECTED		.00005 UNKNOWN	
MERCED RIVER BELOW EXCHEQUER DAM B5 1200.00								
05/29/75 0930	5050 5050	12.0C 35	9.3 7.2		NONE DETECTED		.000015 UNKNOWN	
KAWeah RIVER BELOW TERMINUS DAM CO 2185.00								
05/28/75 0815	5050 5050	14.0C 50	11.1 7.2		NONE DETECTED		.000025 UNKNOWN	
TULE RIVER BELOW SUCCESS DAM CO 3196.00								
05/27/75 1600	5050 5050	14.0C 170	11.2 7.4	3.94	NONE DETECTED		NONE DETECTED	
KERN RIVER NEAR BAKERSFIELD CO 5150.00								
05/27/75 1150	5050 5050	20.0C 115	9.8 8.0		NONE DETECTED		.000025 UNKNOWN	
BIG CREEK ABOVE PINE FLAT RESERVOIR CL 1320.00								
05/28/75 1000	5050 5050	12.5C 40	11.8 7.2	6.87	NONE DETECTED		.00003 UNKNOWN	

APPENDIX E
GROUND WATER QUALITY DATA

INTRODUCTION

Appendix E summarizes the ground water quality data for the San Joaquin Valley for the 1975 water year (October 1, 1974, through September 30, 1975). These data were obtained from analyses of water samples from approximately 500 wells.

Laboratory analyses of ground water samples reported herein were performed in accordance with the 13th Edition of "Standard Methods for Examination of Water and Waste Water".

A complete description of the State Well Numbering System, used in this report to indicate the location of the wells sampled, is contained in Appendix C, "Ground Water Data", page 125. A 40-acre tract may contain a well that has not been assigned a state number or may have a well that is of a temporary nature. These are numbered in the 80 series; i.e., 15S/22E-27K80M.

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

Abbreviations, Chemical Symbols, and Codes used
in this table are:

<u>Abbreviations</u>			
EC	Specific Electrical conductance in micromhos at 25° Celsius	TEMP	Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
NCH	Noncarbonate Hardness	TH	Total Hardness
SAR	Sodium Adsorption Ratio	TIME	Pacific Standard Time on a 24-hour clock
SUM	Summation of Analyzed Constituents	PH	Measure of acidity or alkalinity of water
TDS	Total Dissolved Solids		
REM	Remarks as follows:		
T	Indicates the TDS does <u>not</u> fall within 20 percent of the calculated SUM of the constituents.		
E	Indicates the TDS value is not within the range of 0.35 to 0.70 of the laboratory electrical conductivity.		
S	Indicates the anion sum and cation sum for a complete analysis are <u>not</u> within the prescribed tolerance of ± 5 percent.		
C	Indicates the laboratory electrical conductivity divided by the EC-EPM factor (or if absent, 100), is <u>not</u> within 20 percent of the average of the cation sum and anion sum for a complete analysis.		
X	Indicates the field electrical conductivity and the laboratory electrical conductivity are <u>not</u> within 20 percent of each other.		

Chemical Symbols

B	Boron	K	Potassium
CA	Calcium	MG	Magnesium
CL	Chloride	NA	Sodium
CO ₃	Carbonate	NO ₃	Nitrate
F	Fluoride	SiO ₂	Silica
HCO ₃	Bicarbonate	SO ₄	Sulphate

Sampler (SAMP) and Laboratory (LAB) Codes

5050	Department of Water Resources
5121	Kern County Water Agency
5191	Agricultural Technical Services Company
5205	City of Delano
5617	Semitropic Water Storage District
5647	Tehachapi-Cummings Water District
5701	California Water Service Company
5802	Twining Laboratory - Fresno
5806	B. C. Laboratory

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE LAB	FIELD PH EC	LABORATORY	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HC ₀₃ SO ₄	MILLIGRAMS PER LITER			MILLIGRAMS PER LITER			B SI02 CL N03	F SUM N03	TDS N03 CHM	TM N03 CHM	REM	
					PERCENT REACTANCE	VALUE	PERCENT REACTANCE	VALUE	PERCENT REACTANCE	VALUE						
CENTRAL VALLEY SAN JOAQUIN VALLEY																
06/09/75 1000	1254, HL-29R11 5150	M 75+2F 24+0C B+1	320 3H3 1+00 +0	10 1+2 2+0 10 4	28 1+2 2+0 10 4	64+ +0.0 +0.0 +0.0	0 +1.0 +1.0 +1.0 +1.0	222 3+64 15 4	7+2 15 4	4+7 +1.3 +1.3 +1.3 +1.3	12+0 +19 +19 +19 +19	+10 +10 +10 +10 +10	-- -- -- -- --	256 216 0 136 0	1+0	
06/09/75 1005	1254, HL-24R12 5150	H 68+0F 2+0C B+2	400 6H3 2+00 3J	45 1+5 2+0 2+0 1	19 1+5 2+0 2+0 1	66+ +1.0 +1.0 +1.0 +1.0	0 +1.0 +1.0 +1.0 +1.0	344 4+64 37 5	18 42 7	15 42 48 7	10+0 +48 +48 +48	+00 +00 +00 +00	-- -- -- --	390 366 0 193 0	2+1	
06/09/75 1035	1254, HL-72F11 51511	M 73+4F 23+0C B+2	430 4H5 2+00 44	46 1+2 2+0 2+0 1	16 1+4 2+0 2+0 1	64+ +1.0 +1.0 +1.0 +1.0	0 +1.0 +1.0 +1.0 +1.0	266 4+36 10 44	10 21 7	13 13 13 13 13	14+0 +23 +23 +23 +23	+00 +00 +00 +00	-- -- -- --	308 269 0 182 0	1+1	
06/09/75 1016	1254, HL-33F11 5150	M 71+6F 22+0C B+1	270 3H8 1+30 4J	29 1+3 2+0 2+0 1	83+ +0.8 +0.8 +0.8 +0.8	21 +0.1 +0.1 +0.1 +0.1	51+ +1.3 +1.3 +1.3 +1.3	0 +0.0 +0.0 +0.0 +0.0	146 2+39 78 2	16 42 14 6	36 42 18 6	11+0 +18 +18 +18	+00 +00 +00 +00	-- -- -- --	211 162 0 100 0	0+9 +
05/19/75 1400	1354, 7E-13H01 5150	H 68+0F 7+8	720 723 3H8 3J	59 2+9 2+9 2+9 1	27 2+2 2+2 2+2 1	56+ +2.4 +2.4 +2.4 +2.4	3+1 +1.3 +1.3 +1.3 +1.3	0 +0.0 +0.0 +0.0 +0.0	341 5+59 74 8	29 +1.1 +1.1 +1.1 +1.1	5 +1.1 +1.1 +1.1 +1.1	A1+0 +31 +31 +31	+10 +10 +10 +10	-- -- -- --	462 423 0 258 0	1+5
05/19/75 1130	1354, 7E-23H01 5150	M 66+0F 7+8	670 644 2+94 4J	57 1+97 1+97 1+97 1	24 1+97 1+97 1+97 1	44+ +1.91 +1.91 +1.91 +1.91	3+6 +0.0 +0.0 +0.0 +0.0	0 +0.0 +0.0 +0.0 +0.0	242 4+79 71 7	21 +44 7 14	33 +93 +55 8	74+0 +55 +55 +55	+10 +10 +10 +10	-- -- -- --	395 360 1 240	1+2
05/19/75 1130	1354, 7E-29H01 5150	M 65 F 1H C R+1	1800 1760 5+64 3J2	113 3+13 32 18	38 2+04 2+04 2+04 18	204 8+87 8+87 8+87 18	1+8 +0.5 +0.5 +0.5 +0.5	0 +0.0 +0.0 +0.0 +0.0	322 4+28 30 39	261 5+43 30 39	28+ +54 +54 +54	11+0 +18 +18 +18	+1.70 +1.70 +1.70 +1.70	-- -- -- --	1120 1037 175 440	4+2
06/09/75 1020	1354, HL-45H01 5150	M 71+6F 22+0C B+2	320 370 1+70 4J5	34 1+82 1+82 1+82 3	10 1+13 1+13 1+13 3	26+ +4.5 +4.5 +4.5 +4.5	4+5 +1.3 +1.3 +1.3 +1.3	0 +0.0 +0.0 +0.0 +0.0	146 2+39 80 21	10 +21 +21 +21	11 +31 +31 +31 +31	18+0 +26 +26 +26	+10 +10 +10 +10	-- -- -- --	246 203 0 128 0	1+0
06/09/75 1125	1354, HL-45H01 5150	M 71+4F 23+0C B+4	1890 2+00 3J14	50 3+0 2+0 2+0 14	37 2+02 2+02 2+02 29	120 5+22 5+22 5+22 50	2+6 +1.0 +1.0 +1.0 +2	10 +3.3 +3.3 +3.3 +3	777 7+77 73 73	67 +67 6 10	36 +87 +87 +87	54+0 +87 +87 +87	+20 +20 +20 +20	-- -- -- --	622 568 0 252 0	3+3
05/20/75 1330	1354, HL-14M01 5150	M 66 F 1H C 7+9	625 2+89 2+89 4J0	58 1+91 1+91 1+91 29	22 1+97 1+97 1+97 29	36+ +1.57 +1.57 +1.57 25	0 +0.0 +0.0 +0.0 +0.0	232 3+39 60 13	261 5+43 76 79	40 +58 +58 +58	29+11.0 +11.0 +11.0 +11.0	+1.70 +1.70 +1.70 +1.70	-- -- -- --	438 363 45 237	1+0	
05/19/75 1430	1354, HL-14M01 5150	M 66 F 1H C 7+9	805 2+14 3J37	83 2+14 2+14 3+0 36	25 2+14 2+14 3+0 1	70 3+05 3+05 3+05 1	2+0 +0.0 +0.0 +0.0 +0.0	344 5+46 76 79	36 +75 79 8	24 +68 +68 +68	41+0 +66 +66 +66	+20 +20 +20 +20	-- -- -- --	491 456 0 265	1+9	
05/20/75 0800	1354, HL-20P01 5150	M 66 F 1H C 7+8	500 499 2+35 4J51	67 1+64 1+64 1+64 22	20 1+17 1+17 1+17 21	17 1+17 1+17 1+17 21	1+9 +0.5 +0.5 +0.5 +0.5	0 +0.0 +0.0 +0.0 +0.0	249 4+48 79 5	14 +26 +26 +26 5	9+ +50 +50 +50	31+0 +50 +50 +50	+10 +10 +10 +10	-- -- -- --	320 273 0 200	0+8
05/20/75 0830	1354, HL-21P01 5150	M 66 F 1H C 7+8	600 575 2+79 2J28	56 1+73 1+73 1+73 28	21 1+25 1+25 1+25 28	35 1+25 1+25 1+25 23	2+0 +0.0 +0.0 +0.0 +0.0	278 4+56 76 7	21 +44 7 7	14 +39 +39 +39	38+0 +61 +61 +61	+10 +10 +10 +10	-- -- -- --	348 324 0 226	1+0	
05/20/75 0945	1354, HL-22P01 5150	M 66 F 1H C 7+8	500 560 2+79 2J26	67 1+56 1+56 1+56 26	21 1+25 1+25 1+25 26	26 1+25 1+25 1+25 26	2+0 +0.0 +0.0 +0.0 +0.0	285 3+44 73 11	31 +51 +51 +51	24 +51 +51 +51	41+0 +47 +47 +47	+20 +20 +20 +20	-- -- -- --	491 456 0 265	1+9	
05/20/75 1500	1354, HL-22P01 5150	M 66 F 1H C 7+9	500 560 2+79 2J23	63 1+56 1+56 1+56 23	20 1+25 1+25 1+25 23	26 1+25 1+25 1+25 23	2+0 +0.0 +0.0 +0.0 +0.0	285 3+44 73 10	30 +48 +48 +48	17 +48 +48 +48	27+0 +60 +60 +60	+10 +10 +10 +10	-- -- -- --	372 341 1 216	1+1	
05/20/75 1500	1354, HL-22P01 5150	M 66 F 1H C 7+9	500 560 2+79 2J23	63 1+56 1+56 1+56 23	20 1+25 1+25 1+25 23	26 1+25 1+25 1+25 23	2+0 +0.0 +0.0 +0.0 +0.0	285 3+44 73 10	30 +48 +48 +48	17 +48 +48 +48	27+0 +60 +60 +60	+10 +10 +10 +10	-- -- -- --	372 341 1 216	1+1	
05/21/75 1100	1354, HL-14H01 5150	M 66 F 2+0 C 7+7	300 370 1+15 4J23	23 1+61 1+61 1+61 23	61 2+41 2+41 2+41 23	4+5 +1.0 +1.0 +1.0 2	0 +0.0 +0.0 +0.0 +0.0	233 3+27 77 5	31 +31 +31 +31	31 +31 +31 +31	23+0 +31 +31 +31	+10 +10 +10 +10	-- -- -- --	220 155 0 91	E	
05/21/75 1310	1354, HL-14H01 5150	M 66 F 2+1 C 7+8	500 560 2+20 2J22	46 1+44 1+44 1+44 22	17 1+15 1+15 1+15 22	35 +57 +57 +57 2	0 +0.0 +0.0 +0.0 +0.0	233 3+27 77 14	17 +35 +35 +35	31 +87 +87 +87	23+0 +37 +37 +37	+00 +00 +00 +00	-- -- -- --	348 290 0 190	1+1	
05/21/75 1050	1354, HL-19C01 5150	M 66 F 1H C 7+8	410 412 1+15 4J27	24 1+15 1+15 1+15 27	14 1+15 1+15 1+15 30	29 1+26 1+26 1+26 28	3+1 +0.0 +0.0 +0.0 +0.0	200 3+24 77 2	13 +27 +27 +27	11 +31 +31 +31	24+0 +39 +39 +39	+10 +10 +10 +10	-- -- -- --	288 227 0 144	1+1	
05/21/75 1050	1354, HL-22P11 5150	M 66 F 1H C 7+8	410 431 1+15 4J23	28 1+43 1+43 1+43 22	12 1+15 1+15 1+15 22	33 1+16 1+16 1+16 22	0 +0.0 +0.0 +0.0 +0.0	187 3+16 76 14	29 +60 +60 +60	11 +31 +31 +31	26+0 +42 +42 +42	+00 +00 +00 +00	-- -- -- --	288 245 0 144	1+2	
05/21/75 1250	1354, HL-23E01 5150	M 66 F 2+0 C 7+8	430 444 2+20 2J40	46 1+44 1+44 1+44 24	17 1+15 1+15 1+15 24	35 +57 +57 +57 2	0 +0.0 +0.0 +0.0 +0.0	233 3+27 75 14	31 +65 +65 +65	24+0 +39 +39 +39	20+0 +32 +32 +32	+00 +00 +00 +00	-- -- -- --	298 251 3 174	0+9	

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLED LAB	TFHP PH	FIELD LABORATORY FC	MINERAL CONSTITUENTS IN PPM EQUIVALENTS PER LITER	MILLIGRAMS PER LITER										PHE PERCENT PRACTICE VALUE	H 5102	F TOS SUM	TH NCH	SAR	DEM	
					CA	MG	NA	K	CO3	HC03	504	CL	NO3	147							
CENTRAL VALLEY SAN JOAQUIN VALLEY																					
05/20/75 1345	5u50 5u50	035/10E-12L01	H 6.0 2.0	F C 7.4 37	266 267 1.00	20 +42 15	1.28 1.22 0.9	3.4 0.09 0.3	0 +0.0 +0.2	127 79 0.04	1.8 0.04 +0.23	9.6 +2.7 +0.0	14.0 +2.3 +0.9	+0.0 +0.0 +0.0	-- -- --	147	71	0	1.4		
05/20/75 1400	5u50 5u50	035/10E-25E01	H 6.7 1.9	F C R.0	360 350 1.30	26 +90 26	11 1.13 1.12	2.6 +0.00	4.6 2.36	0 +0.11	5.4 +0.11	27 +0.76	14.0 +2.3 +0.7	+0.0 +0.0 +0.0	-- -- --	232	111	0	1.1	T	
05/20/75 0930	5u50 5u50	035/11E-24E01	H 6.0 1.6	F C R.2	480 675 2.79	56 2.79 1.97	24 2.52 +0.09	5.8 +0.09 1	3.0 +0.09	0 +0.65	374 613 +0.5	31 +0.5 5	12 +3.0 5	+0.0 +0.36 +0.5	-- -- --	397	240	0	1.6		
05/20/75 0900	5u50 5u50	035/11E-34C04	H 7.5 2.4	F C R.1	360 357 1.30	29 +40 34	17 1.74 +0.00	3.4 +0.09	0 +0.00	167 2.74 +0.0	10 +0.21 +0.21	9.6 +0.27 +0.42	26.0 +0.21 +0.12	+0.0 +0.0 +0.0	-- -- --	254	141	6	0.6	E	
05/21/75 1230	5u50 5u50	035/12E-05C01	H 6.7 1.9	F C 7.6	300 286 1.10	22 +90 34	12 1.78 +0.08	1.8 +0.08	3.2 +0.08	0 +0.26	156 2.56 +0.07	5.9 +0.12 +0.04	6.6 +0.12 +0.07	4.1 +0.07 +0.02	+0.0 +0.0 +0.0	-- -- --	214	104	0	0.8	E
05/20/75 1445	5u50 5u50	035/12E-19N01	H 6.0 1.8	F C d.s.	246 247 0.82	16 +32 34	10 2.7 +0.00	15 +0.00	2.4 +0.00	0 +0.00	116 1.90 +0.04	1.8 +0.12 +0.02	7.0 +0.22 +0.16	10.0 +0.09 +0.07	+0.0 +0.0 +0.0	-- -- --	194	86	0	0.7	T
05/19/75 1740	5u50 5u50	035/12E-20N01	H 6.0 1.6	F C 7.8	44 39 4.30	7.0 +36 40	4.4 2.79 +0.00	2.1 +0.00	2.3 +0.00	0 +0.00	40 +0.00	6.2 +0.13 +0.01	0.0 +0.14 +0.01	+0.0 +0.01 +0.01	-- -- --	62	37	0	0.2	T	
05/21/75 1300	5u50 5u50	035/12E-26J01	H 6.0 2.1	F C 7.4	236 274 1.30	15 +36 34	7.9 2.79 +0.00	16 +0.00	4.0 +0.00	0 +0.00	39 1.62 +0.04	4.1 +0.04 +0.02	9.7 +0.27 +0.23	14.0 +0.12 +0.10	+0.0 +0.0 +0.0	-- -- --	169	70	0	0.8	E
05/19/75 1730	5u50 5u50	035/12E-27P01	H 6.0 2.0	F C 7.9	143 140 1.40	42 +41 27	4.7 +3.9 +0.00	13 +0.00	2.2 +0.00	0 +0.00	77 1.26 +0.05	2.3 +0.05 +0.04	1.2 +0.3 +0.03	2.0 +0.03 +0.02	+0.0 +0.0 +0.0	-- -- --	144	40	0	0.9	E
05/19/75 1715	5u50 5u50	035/12E-35H01	H 7.0 2.1	F C R.1	220 190 1.30	10 +50 28	5.1 +5.2 +0.00	17 +1.7 +0.00	5.1 +1.1 +0.00	0 +0.00	73 1.20 +0.04	3.6 +0.07 +0.04	13 +0.13 +0.12	7.3 +0.12 +0.12	+0.0 +0.0 +0.0	-- -- --	174	46	0	1.1	E
05/19/75 1600	5u50 5u50	035/13E-25L01	H 6.0 2.0	F C 7.5	600 604 2.15	43 41 1.2	7.8 +6.4 +0.00	55 +5.0 +0.00	3.0 +0.00	0 +0.00	79 1.29 +0.05	14 +0.29 +0.05	127 +0.59 +0.18	11.0 +0.18 +0.03	+0.0 +0.0 +0.0	-- -- --	419	139	75	2.0	T
05/19/75 1645	5u50 5u50	035/13E-29N01	H 6.0 2.0	F C 7.8	214 202 1.30	13 +45 34	5.7 +4.7 +0.00	15 +5.7 +0.00	6.1 +5.7 +0.00	0 +0.00	75 1.23 +0.05	3.8 +0.05 +0.04	17 +0.18 +0.04	5.5 +0.09 +0.09	+0.0 +0.0 +0.0	-- -- --	171	56	0	0.9	E
05/19/75 1700	5u50 5u50	035/13E-31L01	H 7.0 7.6	F C 7.4	45 24 1.0	24 +12 15	1.0 +0.08 +0.00	12 +0.08 +0.00	3.2 +0.08 +0.00	0 +0.00	41 1.23 +0.05	2.3 +0.05 +0.04	2.0 +0.05 +0.04	+4.0 +0.04 +0.04	+0.0 +0.0 +0.0	-- -- --	104	10	0	1.6	E
05/19/75 1630	5u50 5u50	035/13L-33B01	H 7.0 2.1	F C 7.4	400 301 1.30	22 +16 20	4.5 +4.3 +0.00	19 +1.9 +0.00	5.4 +5.0 +0.00	0 +0.00	122 1.20 +0.04	6.6 +0.15 +0.06	21 +0.16 +0.06	10.0 +0.06 +0.06	+0.0 +0.0 +0.0	-- -- --	232	94	0	0.9	E
05/19/75 1300	5u50 5u50	035/14E-14Q01	H 6.0 2.1	F C R.0	400 39 1.30	21 +41 39	13 +1.7 +0.00	13 +1.7 +0.00	9 +0.00	0 +0.00	139 2.01 +0.05	15 +0.15 +0.05	5.4 +0.15 +0.05	7.7 +0.15 +0.05	+0.0 +0.0 +0.0	-- -- --	157	108	0	0.6	X
10/17/74 1100	5u50 5u50	035/14E-18E01	H 7.0 2.1	F C R.2	1760	--	--	--	--	--	--	--	37 +0.0	+0.0	+0.0	--	562				S
05/21/75 1200	5u50 5u50	035/14E-03L01	H 6.0 2.4	F C R.0	1050 1000 4.79	96 +92 4.11	50 +2.48 +0.00	57 +2.48 +0.00	3.2 +0.00	0 +0.00	343 5.62 +4.9	152 3.16 +2.7	6.6 +1.84 +1.6	54 +0.97 +0.87	+0.0 +0.0 +0.0	-- -- --	700	447	164	1.2	
05/21/75 1130	5u50 5u50	035/14E-14A01	H 6.0 2.1	F C 7.8	1666 1450 6.69	134 59 +0.69	71 +0.64 +0.00	102 +4.44 +0.00	4.0 +10 +0.00	0 +7.36 +4.2	162 3.04 +1.9	208 3.37 +3.3	42.0 +5.97 +1.00	+0.0 +0.0 +0.0	-- -- --	1050	426	259	1.8	S	
05/21/75 0900	5u50 5u50	035/14E-17H01	H 6.0 2.1	F C B.s.	1014 1020 4.69	90 40 3.49	47 +3.67 +0.00	64 +2.78 +0.00	4.1 +10 +0.00	0 +6.75 +6.0	146 3.04 +2.7	50 3.04 +1.2	6.8 +1.00 +1.1	+0.0 +0.0 +0.0	-- -- --	635	420	81	1.4		
05/21/75 0440	5u50 5u50	035/14E-19K01	H 6.0 2.1	F C R.2	812 810 3.14	63 3.35 3.37	51 +2.26 +0.00	52 +2.78 +0.00	3.6 +10 +0.00	0 +7.36 +5.55	308 4.97 +0.00	155 3.23 +0.00	24 +0.98 +0.00	+0.0 +0.0 +0.0	-- -- --	531	327	80	1.3		

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE LAB	TEMP FIELD PH	FIELD LABORATORY FC	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃	MILLIGRAMS PER LITER			MILLIGRAMS PER LITER			REM		
					PERCENT HARDNESS	PERCENT ALKALINITY	CL NO ₃	B SIU ₂	F TOS	TH NCM			
CENTRAL VALLEY SAN JOAQUIN VALLEY													
05/22/75 0700	5050 5150	75°C/19E-04H01	H 63 F 17 C	3900 200 3950 10*28	147 1.09 24 2.09	485 23 48 1	A+B 0 2.23	0 0.08 0.08	530 17.78 40 19	R54 1.15 1.15	640 1.24 1.24	2+20 -- 1.1	
05/22/75 1155	5050 5150	75°C/14E-27P01	H 80°C 739 2.89	58 2.89 38 2.89	23 2.70 25 3.0	62 1.05 1 1	1.8 0.00 0.05	197 3.23 42 4.1	151 3.14 1.4 3	38 1.77 1.4 1.7	13.0 1.21 1.4 1.21	+4.0 -- 1.1	
05/21/75 1350	5050 5150	75°C/14E-31G01	H 67 F 19 C	1374 1.02 1350 5.89	45 3.9 52.2 3.7	120 2.1 2.0 2.0	2.1 0 0.05	351 5.75 39 4.0	181 3.77 26 2.6	145 4.09 2.9 2.9	4.20 +2.0 5.5 5.5	+7.0 -- 1.5	
05/21/75 1415	5050 5150	75°C/4E-32L01	H 68 F 22 C	1246 70 1250 3.79	58 4.77 39 3.9	92 4.00 32 2.1	2.6 0 0.71	0 0.00 0.00	308 5.05 39 3.9	171 3.56 27 2.7	134 3.78 2.9 2.9	30.0 +5.0 5.4 5.4	-- 830 +28 -- 722 1.9
05/22/75 0915	5050 5150	75°C/10E-15F01	H 72 F 22 C	1270 1.04 1280 2.70	2.9 2.2 2.2 2.2	28 12.5 12.5 9.2	3.3 0 0.08	0 0.00 0.00	619 10.15 75 6.6	39 2.81 6 1.9	94 2.65 1.9 1.9	+4.0 -- 0.01	-- 806 4.7 -- 742 18.0
05/22/75 0800	5150 5150	75°C/15E-14D01	M 68 F 21 C	1224 2.9 1230 4.15	24 6.7 12 4	235 10.22 8.2 8.3	3.9 1.0 1.0 1	0 0.00 0.00	504 8.26 65 7.9	46 3.44 8 2.7	122 3.44 2.9 2.9	+4.0 +3.0 0.01	-- 744 100 -- 691 10.2
05/22/75 0915	5150 5150	75°C/11E-21F03	H 71 F 22 C	3400 74 3370 3.69	74 7.4 11 7.4	6 6.0 2.8 6.0	2.4 0 1.1 0	0 0.00 0.00	614 10.23 38 7.7	110 2.29 7 6.3	752 21.21 21 21	+6.0 +0.0 0.00	-- 1910 224 -- 1896 18.6
05/22/75 1105	5150 5150	75°C/10E-23D01	M 72 F 22 C	3900 46 3850 4.09	14 1.15 10 1.15	840 3.54 870 5.21	8.4 0 2.1 0	0 0.00 0.00	1490 24.82 58 2.75	132 15.17 16 15	538 1.01 1.0 1.0	+9.0 -- 0.01	-- 2450 264 -- 2348 0
05/22/75 1240	5150 5150	75°C/10E-24E01	M 75 F 24 C	912 3.9 918 1.95	39 1.6 20 1.4	147 1.32 1.6 1.6	2.9 0 1.1 0	0 0.00 0.00	441 7.23 72 7.23	49 1.02 1.0 1.0	48 1.15 1.4 1.4	+10 -- +1.9	-- 592 165 -- 531 5.0
05/23/75 0925	5150 5150	75°C/11E-01H01	M 64 F 21 C	504 47 494 2.35	16 1.32 43 2.4	36 1.47 2.9 2.9	8.5 0 2.2 0	0 0.00 0.00	251 4.11 77 7.7	22 4.18 9 3	64 2.80 1.1 1.1	+0.0 -- +0.1	-- 343 181 -- 297 0
05/22/75 1350	5150 5150	75°C/11E-14K01	M 71 F 21 C	1178 31 1200 1.55	4.7 1.39 3.1 1.39	221 4.11 4.11 4.11	4.4 0 0.0 0	0 0.00 0.00	386 6.33 53 7.1	34 4.88 6 4.88	173 0.00 1.1 1.1	+2.0 -- 0.00	-- 695 97 -- 658 9.8
05/23/75 0730	5150 5150	75°C/11E-01H01	M 66 F 14 C	859 63 932 3.14	18 1.08 3.2 1.05	114 4.06 4.06 4.06	6.0 0 2.1 0	0 0.00 0.00	410 6.85 69 8.9	39 2.17 21 2.1	12.0 1.19 1.2 1.2	+10 -- +1.9	-- 581 732 -- 533 0
05/27/75 0810	5150 5150	75°C/12E-03F01	M 68 F 27 C	186 12 185 2.00	3.9 1.32 3.4 1.32	18 1.47 1.47 1.47	1.6 0 0.0 0	0 0.00 0.00	192 1.77 59 2.07	65 1.81 20 6	40 1.70 1.5 1.5	+0.0 -- +0.0	-- 184 4.6 -- 106 1.2
05/23/75 1010	5150 5150	75°C/12E-04E01	M 68 F 2 C	420 32 415 1.79	14 1.15 1.6 1.15	33 1.01 1.01 1.01	8.5 0 0.0 0	0 0.00 0.00	192 3.15 72 3.15	74 4.22 10 5	37 3.00 1.4 1.4	+10.0 -- +0.0	-- 298 1.4 -- 243 1.2
05/27/75 0920	5150 5150	75°C/13E-19H01	M 68 F 2 C	330 33 325 1.05	13 1.07 3.2 1.07	14 1.01 1.01 1.01	2.0 0 0.0 0	0 0.00 0.00	193 2.34 70 2.34	17 3.00 10 5	64 1.48 1.4 1.4	+0.0 -- +0.0	-- 262 1.9 -- 186 0.5
05/27/75 1440	5150 5150	75°C/13L-22H02	M 7 F 21 C	620 28 616 2.30	28 6.2 2.32 6.2	4.1 1.01 1.01 1.01	4.1 0 0.0 0	0 0.00 0.00	394 4.61 41 4.61	20 4.52 6 4.52	3.5 1.13 1.0 1.0	+10.0 -- +1.3	-- 359 1.1 -- 359 1.1
05/27/75 1030	5150 5150	75°C/14E-15A02	M 68 F 2 C	212 16 207 1.04	80 1.04 30 1.04	74 1.03 1.03 1.03	8.0 0 0.0 0	0 0.00 0.00	395 1.75 91 2.07	46 1.18 6 1.18	5.0 1.0 0.5 0.5	+0.0 -- +0.0	-- 179 0.7 -- 112 0.7
05/27/75 1000	5150 5150	75°C/14E-28A02	M 67 F 14 C	452 40 442 2.00	21 1.04 1.01 1.04	25 1.03 1.03 1.03	4.4 0 0.0 0	0 0.00 0.00	396 4.45 43 5.23	11 4.52 5 4.52	4.2 1.07 1.0 1.0	+0.0 -- +0.7	-- 302 0.8 -- 247 0.8
05/27/75 0900	5150 5150	75°C/14E-31H01	M 7 F 21 C	322 23 309 1.15	23 1.04 1.01 1.04	74 1.03 1.03 1.03	7.4 0 0.0 0	0 0.00 0.00	397 1.51 77 2.07	19 1.21 12 1.21	8.6 1.14 1.1 1.14	+0.0 -- +0.7	-- 242 1.3 -- 175 0.7
05/27/75 0930	5150 5150	75°C/14E-32E01	M 7 F 21 C	1074 42 1050 4.04	46 3.16 3.16 3.16	25 3.03 3.03 3.03	7.5 0 0.0 0	0 0.00 0.00	608 9.97 81 9.97	37 1.01 6 1.01	39 3.00 1.0 1.0	+10.0 -- +0.8	-- 668 1.8 -- 633 0
05/27/75 0930	5150 5150	75°C/14E-32E01	M 7 F 21 C	1074 42 1050 4.04	46 3.16 3.16 3.16	25 3.03 3.03 3.03	7.5 0 0.0 0	0 0.00 0.00	608 9.97 81 9.97	37 1.01 6 1.01	39 3.00 1.0 1.0	+10.0 -- +0.8	-- 668 1.8 -- 633 0

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLES LAB	TEMP FIELD PM EC	FIELD LABORATORY	MINERAL CONSTITUENTS IN CA MG NA K CO3 HCO3 SO4 CL NO3	MILLIGRAMS PER LITER		MILLIGRAMS PER LITER		PERCENT REACTANCE VALUE	A	F	TDS	TH SUM NCH	REW Sd0	
					CA	HG	NA	K	CO3	HCO3	SO4	CL	NO3	S102	
CENTRAL VALLEY SAN JOAQUIN VALLEY															
05/27/75 1200	075/15E-29001 5500	M 71 22 C 8.2 439 1.70 35 26		448 3% 15 40 5% 0 0 198 42 12 15.0 +00 -- 302 147 0 1.4											
05/27/75 1200	075/15E-30E01 5500	M 67 19 C 8.1 736 3.29 3.9 37		742 66 38 +6 3.0 0 0 328 102 13 28.0 +00 -- 493 123 52 1.1											
05/27/75 1440	075/15E-34J01 5500	M 71 22 C 8.1 451 2.00 40 31		464 40 19 32 4.1 0 0 246 12 4.0 5.8 +00 -- 290 177 0 1.0											
05/27/75 1415	075/15E-36E01 5500	M 68 28 C 8.2 316 1.25 3.8 28		318 25 11 23 4.2 0 0 156 15 7.9 12.0 +00 -- 240 109 0 1.0											E
10/16/74 1100	085/10E-09F01 5500	M 72 22 F C 3710		-- -- -- -- -- -- -- 746 22.17 .5 3.00 -- -- 292 5											
08/26/75	105/17E-08R00 5502	M -- 200 .37		19 6.0 25 1.0 0 0 89 7.0 16 1.0 +10 -- 209 72 0 1.3											T
08/26/75	105/17E-09F00 5502	M 7.9 250 1.10 16		22 5.0 25 1.0 0 0 119 7.0 18 9.0 +10 -- 219 76 0 1.3											E
08/26/75	105/17E-17R00 5502	M 8.0 235 1.40 17		22 5.0 20 1.0 0 0 89 7.0 16 2.0 +10 -- 214 76 3 1.0											E
01/14/75 0945	145/25E-03A01 5500	M 52 11 C 7.9 476 2.59 1.81 35		52 22 15 2.9 0 0 268 17 6.2 1.0 +00 -- 313 226 1 0.4											
01/14/75 1300	145/25E-03F01 5500	M 7.2 531 3.14 5.6 31		516 63 21 1.73 12 1 0 293 11 7.7 2.0 +00 -- 305 289 4 0.4											
01/14/75 1445	145/25E-04K01 5500	M 7.6 366 2.15 1.15 38		43 14 10 1.0 0 0 210 9.0 1.9 12.0 +00 -- 254 195 170 0 0.3											T
01/14/75 0925	145/25E-09C01 5500	M 7.3 445 1.40 1.20 24		35 15 1.25 1.35 1 0 0 202 12 6.2 2.0 +00 -- 274 245 154 0 1.1											
01/14/75 1400	145/25E-10E01 5500	M 7.1 350 1.25 0.94 37		334 25 12 2.4 0 0 140 11 9.1 1.0 +00 -- 222 190 114 0 1.0											
01/14/75 1045	145/25E-10L01 5500	M 7.4 704 3.49 1.04 50		670 74 10 4.5 0 0 361 16 2.8 1.0 +00 -- 423 383 770 0 1.2											
01/14/75 1115	145/25E-10R01 5500	M 7.6 314 1.55 .82 25		314 31 18 3.3 0 0 153 6.1 8.2 2.0 +00 -- 225 172 121 0 0.7											E
01/14/75 1230	145/25E-11A01 5500	M 7.5 336 1.60 1.07 46		320 32 13 1.6 0 0 158 11 6.2 2.0 +00 -- 246 185 134 4 0.7											E
01/14/75 1010	145/25E-16L03 5500	M 7.3 419 1.65 1.15 28		400 33 14 2.8 0 0 151 25 11 4.0 +00 -- 281 232 139 17 1.0											
09/11/75	155/22E-31A01 5701	M bh 2n C 7.6		34 +.0 20 5.7 11											
05/27/75	155/22E-32L01 5701	M 7.6 21 C R.3		18 +.0 1.70 +.90 +.00 55											
08/18/75	165/22E-05C01 5701	M bb 2n C B.0		27 3.0 1.75 +.25 +.00 1.00											

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE NO.	TEMP PH	FIELD LABORATORY	MINERAL CONSTITUENTS IN CA MG NA K CO ₂ HCO ₃ SO ₄	MILLIGRAMS PER LITER				MILLIGRAMS PER LITER								
					PERCENT REACTIONS CL	MILLIEQUIVALENTS PER LITER HC03	PERCENT REACTIONS Na3	SUM P.M.	B SiO ₂	F Al ₂ O ₃	TDS NCH	TH SAR					
CENTRAL VALLEY SAN JOAQUIN VALLEY																	
09/11/75	5701	185/22E-05C02	M 7.1 21	F C T+H 216	22 1.16 1.50	2.0 .16 4	17 .74 16	2.0 .01 1.2	*4 1.43 1.0	87 1.10 1.48	5.0 .11 1.11	17 1.48 1.11	7.0 1.11 1.11	-- 21.0 21.0	138 136 66	0 0 0.9	
03/03/75	5701	185/22E-05E01	M 6.8 21	F C H+L 24K	25 1.30 53	4.0 .33 13	18 .76 12	2.3 .06 2	*8 1.57 1	96 1.57 65	7.0 .15 1.22	19 1.54 1.13	8.0 1.13 5	-- 27.0 22.0	159 159 80	2 2 0.9	
09/16/75	5701				--	--	--	--	--	--	--	--	*10 --	--	5		
07/02/75	5701	185/22E-05F02	M 7.1 21	F C 8.5	152 .80	1.0 .08 41	17 .74 5	1.7 .06 3	*1.3 1.44 3	61 1.66 6.6	4.0 .05 5	12 1.54 2.2	4.0 .06 4	-- 14.0 14.0	98 97 36	0 0 1.3	
05/27/75	5701	185/22E-05H01	M 6.9 21	F C 8.7	29K 1.60	3.0 .33 55	4.0 .91 11	21 .91 2	*5.8 1.03 0.3	9.0 1.85 1.62	9.0 1.17 1.17	25 1.71 2.4	13.0 *21 7	-- 20.0 20.0	183 182 98	3 3 0.9	
04/01/75	5701	185/22E-06G01	M 6.7 19	F C 7.7	142 2.25	4.0 .43 31	28 1.72 2	3.0 .06 2	*5 2.51 6.2	153 2.51 12	24 1.56 16	23 1.35 9	22.0 *.35 9	-- 24.0 24.0	249 249 130	1 1 1.1	
03/03/75	5701	185/22E-06K01	M 6.6 21	F C 8.4	14R 1.40	1.0 .90 47	21 .89 4	2.5 .91 2	*8 1.42 2	11.3 1.40 6.1	9.0 1.17 1.17	19 1.18 8	11.0 *.18 20	-- 18.0 18.0	129 129 50	0 0 1.3	
05/22/75	5701				--	--	--	--	--	--	--	--	*.06 --	--	5		
08/18/75	5701	185/22E-06A01	M 7.1 22	F C 8.1	26A 1.40	2.8 .25 53	3.0 .91 10	21 1.00 35	*2.5 1.00 2	9.0 1.66 1	19.1 1.19 1.19	9.0 1.65 7	23 1.18 7	11.0 *.18 7	-- 17.0 17.0	165 165 84	0 0 1.0
04/01/75	5701	185/22E-07A01	M 6.7 19	F C 8.0	14R 1.40	4.0 .54 50	7.0 1.04 15	2.4 1.04 27	*3.0 1.04 2	1.0 2.44 6	14.0 2.44 6	12 1.59 5	14.0 *.23 6	-- 27.0 27.0	241 240 140	1 1 0.9	
08/18/75	5701	185/22E-07C12	M 7.1 22	F C 8.4	14A 1.40	13 .65 41	1.0 .08 41	1.5 .83 4	*4.0 1.04 4	59 1.04 2	4.0 1.04 2	12 1.34 5	8.0 *.13 8	-- 14.0 14.0	101 102 36	0 0 1.4	
10/07/74	5701	185/24E-25L01	M 6.7 19	F C 7.9	41A 1.40	5.0 .66 66	8.0 1.74 16	1.7 1.04 1	*1.0 1.04 1	18.4 1.42 1	15 1.51 1	18 1.21 7	17.0 *.21 7	-- 24.0 24.0	247 247 173	0 0 0.6	
05/29/75	5701	185/24E-25L01	M 6.8 21	F C 7.8	342 2.29	4.0 .66 62	8.0 1.66 19	1.5 1.04 1	*7 1.02 76	162 2.60 7	11 1.23 7	15 1.42 12	11.0 *.18 5	-- 18.0 18.0	205 204 144	0 0 0.5	
04/19/75	5701	185/24E-27R02	M 7.1 7.5	F C 8.1	241 1.50	3.0 .25 60	1.0 1.70 10	1.0 1.04 2	*3 1.17 1	11.7 1.42 1	8.0 1.42 1	11 1.17 1	7.0 1.11 1	-- 14.0 14.0	152 152 86	0 0 0.7	
07/03/75	5701	185/24E-33H01	M 6.7 14	F C H+L	18A 1.10	2.2 1.40 60	1.0 1.04 4	1.0 1.04 34	*9 1.03 2	86 1.41 7	4.0 1.03 6	10 1.03 4	4.0 1.03 3	-- 12.0 12.0	112 111 60	0 0 0.8	
04/16/75	5701	185/24E-33C01	M 6.6 14	F C 8.2	221 1.40	2.0 1.45 63	1.5 1.04 7	1.2 1.04 2	*1.1 1.04 7	9.0 1.61 1	6.0 1.12 1	13 1.17 1	8.0 1.13 6	-- 14.0 14.0	142 141 78	0 0 0.7	
05/29/75	5701	185/24E-33E01	M 6.7 14	F C 7.9	240 1.55	3.0 .16 66	1.4 1.04 7	1.6 1.04 26	*5 1.02 2	111 1.42 1	6.0 1.12 1	11 1.11 1	4.0 1.06 3	-- 15.0 15.0	141 140 86	0 0 0.7	
01/17/75	5701	185/24E-33H01	M 6.5 18	F C 7.7	324 2.30	4.0 .49 68	6.0 1.49 14	1.3 1.04 17	*5 1.02 1	155 2.54 76	10 2.54 6	13 1.37 11	12.0 *.19 6	-- 24.0 24.0	201 202 140	1 1 0.5	
10/07/74	5701	185/24E-36R01	M 6.7 19	F C 7.9	246 1.95	3.0 .33 69	4.0 1.20 12	1.2 1.04 18	*7 1.02 1	135 2.21 79	8.0 2.21 6	9.0 1.17 6	9.0 1.15 5	-- 24.0 24.0	174 173 115	3 3 0.5	
04/16/75	5701	185/25E-14N01	M 6.5 18	F C 7.4	234 1.70	3.0 .41 70	5.0 1.30 17	7.0 1.02 12	*2 1.01 1	122 2.00 80	7.0 2.00 6	8.0 1.15 6	7.0 1.11 4	-- 38.0 38.0	167 167 106	5 5 0.3	
10/08/74	5701	185/25E-14N02	M 6.6 14	F C 7.2	237 1.60	3.0 .58 64	7.0 1.02 23	7.0 1.02 12	*1 1.01 1	122 2.00 82	R ₀ 6.0 7	6.0 1.17 7	7.0 1.11 4	-- 36.0 36.0	164 164 108	9 9 0.3	
02/04/75	5701	185/25E-14N02	M 6.4 18	F C 7.2	227 1.60	3.0 .33 71	4.0 1.02 15	7.0 1.02 13	*1 1.01 1	110 2.00 79	7.0 1.15 6	7.0 1.17 5	7.0 1.11 5	-- 38.0 38.0	158 158 98	7 7 0.3	

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLED LAD.	TEMP FIELD PR LABORATORY FC	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃ SO ₄ CL NO ₃	MILLIGRAMS PER LITER		PERCENT REACTANCE VALUE	MILLIGRAMS PER LITER	8 SI102	F SUM	TDS NCH	TH SAR	REM	
				1	2								
CENTRAL VALLEY SAN JOAQUIN VALLEY													
06/06/75	5701	185/25E-14N02	M	--	--	--	--	--	--	--	--	--	--
	5701												
04/17/75	5701	185/25E-19N01	M	24	2.0	13	1.1	9	103	5.0	6.0	5.0	--
	5701	19	C	8.1	1.20	.57	.59	.03	.03	.10	.17	.08	0.7
02/25/75	5701	185/25E-20E01	M	39	9.0	11	1.1	1.1	157	8.0	8.0	10.0	--
	5701	304	R.C	1.95	.74	.8	.03	.04	.27	.17	.23	.16	0.4
09/29/75	5701	185/25E-23C01	M	22	2.0	6.0	.7	.1	75	7.0	2.0	7.0	--
	5701	16	C	7.2	1.10	.26	.02	.00	.12	.15	.06	.11	0.3
09/02/75	5701	185/25E-27N01	M	23	2.0	11	1.0	1.2	88	5.0	5.0	6.0	--
	5701	18	C	8.3	1.15	.48	.03	.04	.14	.10	.14	.10	0.6
09/02/75	5701	185/25E-27P01	M	17	1.0	17	1.0	1.4	82	6.0	6.0	4.0	--
	5701	18	C	8.4	.85	.74	.03	.02	.13	.12	.17	.06	1.1
04/16/75	5701	185/25E-28D01	M	26	2.0	10	1.0	8	98	5.0	5.0	4.0	--
	5701	18	C	R.I.	1.30	.44	.03	.03	.13	.10	.14	.06	0.5
03/21/75	5701	185/25E-28L01	M	34	6.0	11	1.1	3	131	8.0	8.0	10.0	--
	5701	16	C	7.5	2.56	1.79	.49	.03	.01	.25	.17	.23	0.5
05/24/75	5701	185/25E-29B01	M	24	1.0	11	1.3	5	97	5.0	2.0	2.0	--
	5701	18	C	7.9	1.87	1.20	.08	.02	.01	.15	.10	.16	0.6
02/04/75	5701	185/25E-29C01	M	20	3.0	8.0	.6	.2	75	6.0	6.0	4.0	--
	5701	16	C	7.5	1.59	.25	.22	.02	.01	.23	.12	.17	0.6
02/04/75	5701	185/25E-29R01	M	32	3.0	10	1.0	4	112	7.0	6.0	8.0	--
	5701	18	C	7.7	2.26	1.60	.25	.04	.01	.86	.17	.13	0.5
03/21/75	5701	185/25E-30F01	M	22	2.0	13	1.1	1.0	93	5.0	5.0	3.0	--
	5701	19	C	8.2	1.74	1.50	.16	.07	.03	.10	.14	.05	0.7
10/07/74	5701	185/25E-30n01	M	55	6.0	15	1.6	8	157	17	25	18.0	--
	5701	19	C	7.9	3.98	2.74	.49	.04	.03	.57	.35	.71	0.5
09/02/75	5701	185/25E-30R01	M	59	5.0	15	1.6	8	165	19	26	23	--
	5701	19	C	7.9	4.05	2.94	.41	.05	.03	.70	.10	.18	0.5
05/29/75	5701	185/25E-30R02	M	35	3.0	14	1.6	4	126	10	11	6.0	--
	5701	19	C	7.7	2.69	1.75	.25	.04	.01	.21	.17	.13	0.6
02/04/75	5701	185/25E-31B01	M	30	2.0	12	1.1	3	102	8.0	8.0	10.0	--
	5701	18	C	7.6	2.28	1.50	.16	.05	.03	.74	.12	.13	0.6
04/17/75	5701	185/25E-31B01	M	--	--	--	--	--	--	--	--	--	--
09/02/75	5701	185/25E-31B03	M	54	7.0	13	1.1	6	150	15	26	8.0	--
	5701	19	C	7.8	3.57	2.66	.57	.07	.07	.26	.13	.22	0.5
09/02/75	5701	185/25E-31E01	M	32	2.0	11	1.1	9	108	6.0	6.0	4.0	--
	5701	19	C	8.1	2.74	1.60	.16	.08	.03	.77	.12	.10	0.5
02/04/75	5701	185/25E-31E01	M	26	1.0	12	1.1	6	97	4.0	7.0	3.0	--
	5701	18	C	7.9	1.92	1.30	.08	.05	.02	.82	.10	.05	0.6
03/19/75	5701	185/25E-31R01	M	29	1.0	14	1.3	9	109	A.0	B.0	B.0	--
	5701	8.1	2.16	1.49	.08	.61	.03	.03	.17	.12	.23	.10	0.7

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE LAB	TEMP PM	FIELD EC	LABORATORY HG	MINEPAL CONSTITUENTS IN CA	MINERALS IN NA	K CO3	MILLIEQUIVALENTS/LITER MC03	MILLIGRAMS PER LITER 504	REFRACTANCE VALUE CL NO3	MILLIGRAMS PER LITER			REH		
											8 5102	F 105	TOS TH			
KUWELM1 CENTRAL VALLEY SAN JOAQUIN VALLEY																
05/29/75	5701	M 65 5701	1h C 7.9	202	28 1.40 66	3.0 .25 12	10 .44 21	1.3 .03 1	.6 1.19 1	100 .08 4	4.0 1.14 7	5.0 .05 2	-- 17.0 1	125 125 0	82 0 0.5	
05/29/75	5701	M 65 5701	1h C 7.9	204	30 1.50 72	2.0 .16 8	9.0 .34 19	1.3 .03 1	.6 1.82 1	111 .08 4	4.0 1.14 7	5.0 .05 2	-- 19.0 1	129 128 0	84 0 0.4	
04/18/75	5701	M 66 5701	1h C 7.3	276	37 1.55 65	5.0 .49 17	11 .48 17	.8 .02 1	2 .01 1	119 1.95 69	13 .27 10	11 .31 11	18.0 .29 10	-- 33.0 1	188 189 19	116 0 0.4
09/19/75	5701	M 66 5701	1h C 7.8	221	37 1.35 61	5.0 .43 15	11 .32 23	.8 .03 1	2 .01 1	119 1.77 7	13 .12 5	11 .25 11	18.0 .15 7	-- -- --	0.0 -- --	-- -- --
07/03/75	5701	M 66 5701	1h C 7.8	221	37 1.35 61	5.0 .43 15	12 .32 23	1.0 .03 1	.4 .01 1	107 1.75 7	6.0 .12 5	9.0 .25 11	9.0 .15 7	-- 19.0 1	140 140 0	86 0 0.6
07/03/75	5701	M 66 5701	1h C 7.8	420	62 3.09 7.3	5.0 .49 12	14 .31 14	1.0 .03 1	.7 .02 1	172 2.82 29	14 .08 7	30 .85 20	17.0 .27 6	-- 19.0 1	249 248 0	180 37 0.5
04/16/75	5701	M 66 5701	1h C 8.0	388	54 2.69 75	3.0 .29 7	14 .61 17	1.3 .03 1	.8 .03 1	118 1.93 53	7.0 .15 4	4.9 1.38 38	8.0 .13 4	-- 25.0 1	221 220 0	148 49 0.5
09/02/75	5701	M 67 5701	1h C 7.9	314	46 2.30 7.3	3.0 .25 4	13 .57 18	.9 .02 1	.7 .02 1	135 2.21 7	13.5 2.1 7	14 .39 12	71.0 .34 11	-- 26.0 1	195 195 0	128 16 0.5
10/07/74	5701	M 65 5701	1h C 8.0	210	29 1.45 71	1.0 .08 4	11 .48 24	1.2 .03 1	.7 .02 1	106 1.74 83	6.0 .12 6	5.0 .14 7	5.0 .08 4	-- 20.0 1	131 131 0	79 0 0.5
10/07/74	5701	M 66 5701	1h C 8.1	208	30 1.50 72	1.0 .08 4	11 .48 23	1.3 .03 1	.9 .03 1	111 1.66 77	6.0 .12 6	9.0 .25 12	6.0 .10 5	-- 15.0 1	131 130 0	82 0 0.5
07/03/75	5701	M 66 5701	1h C 8.1	208	30 1.50 72	1.0 .08 4	11 .48 23	1.3 .03 1	.9 .03 1	111 1.66 77	6.0 .12 6	9.0 .25 12	6.0 .10 5	-- 15.0 1	131 130 0	82 0 0.5
07/03/75	5701	M 66 5701	1h C 8.2	174	22 1.10 63	1.0 .08 4	14 .41 35	1.2 .03 2	.9 .03 2	91 1.33 74	5.1 .10 6	9.0 .25 14	5.0 .08 4	-- 11.0 1	109 108 0	56 0 0.8
07/03/75	5701	M 65 5701	1h C 7.9	278	38 1.90 71	1.3 .16 6	13 .57 21	1.2 .03 1	.5 .02 1	89 1.46 45	5.0 .10 4	34 1.11 4	7.0 .11 4	-- 13.0 1	156 157 0	102 29 0.6
04/16/75	5701	M 66 5701	1h C 7.9	347	47 2.35 67	5.0 .25 20	16 .41 20	1.2 .02 1	.5 .02 1	88 1.46 47	5.0 .10 8	34 1.11 6	7.0 .11 6	-- 25.0 1	216 215 0	140 18 0.6
10/07/74	5701	M 67 5701	1h C 8.0	197	25 1.29 64	1.0 .08 4	14 .41 31	1.2 .02 1	.6 .02 1	89 1.33 74	5.0 .10 6	34 1.11 4	7.0 .11 4	-- 19.0 1	128 127 0	67 0 0.7
02/04/75	5701	M 65 5701	1h C 7.9	208	27 1.35 68	1.0 .08 4	14 .41 31	1.2 .02 1	.5 .02 1	87 1.43 72	6.0 .12 6	8.0 .23 12	12.0 .19 10	-- 12.0 1	122 123 0	68 0 0.7
04/17/75	5701	M 66 5701	1h C 8.1	208	27 1.35 68	1.0 .08 4	15 .46 31	1.2 .03 1	.9 .03 1	94 1.54 73	6.0 .12 6	8.0 .23 11	11.0 .18 9	-- 22.0 1	138 138 0	72 0 0.8
06/09/75	5121 5191	M 66 5606	1h C 8.1	420	11 0.55 1.2	1.2 .11 2	85 3.70 83	3.9 .10 2	0 .00 2	208 3.41 70	5.0 .10 2	2.0 1.24 25	5.5 1.12 2	-- 262 --	33 261 0	6.5 5
05/15/75	5121 5191	M 66 5606	1h C 8.1	150	27 0.55 1.4	1.2 .11 4	85 3.70 83	3.9 .10 2	0 .00 2	208 3.41 70	5.0 .10 2	2.0 1.24 25	5.5 1.12 2	-- 262 --	33 261 0	6.5 5
06/09/75	5121 5191	M 66 5606	1h C 8.1	1390	27 1.35 11	4.0 .33 3	244 10.61 A6	2.2 .06 1	0 .00 1	81 1.33 10	5.0 .10 36	267 7.53 54	.5 1.01 1	-- 59 --	829 829 18	84 11.6 5
05/15/75	5121 5606	M 7.0E 21.1C	H+4	190	46.0 +2.0 11	+1 0.01 1	36 1.57 P7	9.0 .02 1	0 .00 1	84 1.33 10	5.0 .10 36	8.0 1.23 13	.5 0.01 1	-- 104 --	104 121 0	4.9 0 4.9

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP FIELD PH EC	FIELD LABORATORY CA MG NA K CO3 HCO3	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER		PERCENT REACTANCE VALUE	R	F	TOS	TM	NCM	SR	REM				
					504	504 CL NO3												
CENTRAL VALLEY 54N JOAQUIN VALLEY																		
06/06/75	5121 5806	255/23E-10P01	H 76.0F 25.5C	B+0 8.4	580	8+0 7	+5 0+4	120 1	1+4 5+22	12 1	.60 .98	5+0 .10	151 4+26	.5 .01	.24 20.0	325 348	22 0	11.1
02/03/75	5121 5806	255/23E-12R02	H 76 24 C 9.3	170	1+9 5	+0 0+0	37 1+41	-- 1.25	37 73	10 9	9.0 .19	3+2 .09	1+7 .03	.05 5	-- --	96 95	5 0	7.4
12/21/74	5121 5806	255/23E-16F00	H 69 21 C 7.8	770	34 1+50	+2 0+2	139 6+45	-- .00	0 1.08	46 52	52 5+86	207 .03	1.7 1.03	.02 --	451 450	76 43	7.0	
12/27/74	5121 5806	255/23E-16K00	H 71 22 C 7.3	240	3+9 8	+0 0+0	48 2+09	-- 0.92	0 0.00	56 .92	15 .31	37 1+7	.9 .01	.03 --	134 133	10 0	6.7	
03/27/75	5121 5806	255/23E-24R01	H 75 24 C 9.1	290	4+3 6	+0 0+0	58 2+52	-- 1.39	41 4.3	10 1.18	5.0 .10	55 1.58	.5 .01	.05 --	179 170	11 0	7.7	
05/15/75	5121 5806	255/23E-24R01	H 79 26 C 9.1	300	5+0 2+9	+0 0+0	62 2+70	1+1 1.03	23 2.76	37 2.0	5+0 1.50	53 1.50	.5 .01	.01 20.0	168 168	13 0	7.6	
05/15/75	5121 5806	255/23E-24R00	H 78 26 C 9.0	200	3+0 7	+0 0+0	44 1+91	1+0 1.73	36 1.22	24 1.9	5+0 1.50	13 1.58	.5 .01	.01 21.0	115 136	8 0	7.0	
04/08/75	5121 5806	255/23E-27E01	H 73 23 C 9.6	180	.1 0.00	.1 0.01	43 1.97	-- 3.64	19 3.4	49 4.2	10 1.11	8.9 2.25	.5 .01	.14 1	108 106	1 0	23.0	
05/09/75	5121 5806	255/23E-27H01	H 78 26 C 7.3	1240	99 4+94	+4 0.03	172 1+48	2+6 1.07	0 0.00	27 4.4	111 2.31	344 9.70	2+1 .03	.01 11.0	745 755	2+9 227	4.7	
03/27/75	5121 5806	255/23E-33E01	H 75 24 C 8.5	450	24 1+20	+1 0.01	72 3+13	-- 3.31	32 7	22 8	44 3.36	38 2.77	2+5 2.04	.03 1	-- --	263 261	61 27	4.0
05/09/75	5121 5806	255/24E-33R01	H 76 24 C 7.3	8340	1020 50.90	6+8 5.56	740 32+19	9+0 2+3	0 0.00	31 1.51	584 12+16	2520 71.86	b+2 b+10	.12 1.10	-- --	4902 4911	2578 2550	6.3
04/08/75	5121 5806	255/24E-35R01	H 79 24 C 9.7	180	.1 0.01	.1 0.01	41 1.78	-- 3.67	20 3.5	47 4.1	5+0 1.58	.12 1.18	.5 0.01	.10 --	101 102	1 0	21.9	
11/26/74	5121 5806	255/24E-06002	H 73 23 C 8.5	540	21 1+05	+5 0.04	97 1+22	-- 3.31	9+3 7.5	46 1.64	81 2.62	4+5 4.07	.12 --	-- --	327 325	55 2	5.7	
05/09/75	5121 5806	255/24E-11R01	H 74 23 C 7.7	100	14 .89	+1 0.01	48 2+00	1+4 1.64	0 0.00	70 1.15	36 1.00	35 1.00	2+1 0.03	.01 2+0	-- --	174 197	40 0	3.3
03/26/75	5121 5806	255/24E-11R01	H 75 24 C 7.8	800	4+6 2+7	+7 0.06	56 2+44	-- 5.52	0 0.00	80 1.31	57 1.19	78 2.21	5+0 0.08	.03 2	-- --	284 280	113 48	2.3
06/09/75	5121 5806	255/24E-12R01	H 77 24 C 7.6	110	9+0 4+5	+6 0.07	10 4+4	1+2 3	0 0.00	67 1.10	1+0 1.02	1+0 1.54	1+7 1.55	.13 .01	-- --	56 57	26 0	0.9
06/09/75	5121 5806	255/24E-13Pn01	H 75 24 C 7.3	84	570 1+00	4+7 28+44	117 5.09	3+5 .09	0 0.00	67 1.10	740 15.41	6+2 16.98	39+0 .63	.05 --	-- --	2110 2109	1443 1388	1.3
05/09/75	5121 5806	255/24E-19R02	H 75 24 C 7.9	1020	67 3+34	+3 0.02	164 7+13	2+1 6.8	0 0.05	74 1.21	154 1.21	197 5.56	34+3 .55	.01 5	-- --	656 671	169 108	5.5
12/02/74	5121 5806	255/24E-22H01	H 76 24 C 8.4	3600	111 1+7	+0 0.00	46 2+87	-- 3	6+0 1.31	26 1.31	63 1.34	47 1.19	11+6 1.19	.03 --	-- --	221 218	29 0	5.4
12/02/74	5121 5806	255/24E-23Pn01	H 73 23 C 7.3	570	46 2+30	+3 0.02	75 3.26	-- 1.00	0 0.00	43 1.10	94 1.46	46 2+51	28+6 1.46	.02 --	-- --	387 354	116 81	3.0

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE No.	TEMP PM	FIELD LABORATORY	EC	MINERAL CONSTITUENTS IN PPM						MILLIGRAMS PER LITER		MILLIGRAMS PER LITER									
					CA	MG	NA	K	C03	HCO3	504	CL	N03	S102	B	F	TDS	TH	SiO2	NCH	54R	REM
CENTRAL VALLEY SAN JOAQUIN VALLEY																						
05/09/75	5121 5806	255/24E-27Hn3	M	7.6 23	F C	7.7 7.5	940 4.49	110 4.12	1.5 3.43	88 0.06	2.4 0.06	0 7.0	43 7	195 4.06	130 3.47	67.7 1.09	.01 .03	7.7 33.0	615 33.0	281 649	246 246	2.3
12/12/74	5017 5806	255/24E-27Hn3	M	7.6 24	F C	7.5 8.6	210 2.4	10 4.5	.1 0.02	41 2.18	-- .01	0 4.3	57 39	43 1.9	15 3	3.5 1.4	.06 +.03	-- --	142 141	26 0	3.5 3.5	
06/06/75	5121 5806	255/24E-27Hn3	M	7.5 24	F C	8.6 A.6	290 2.4	13 1	.2 1.76	50 1.00	4.4 1.49	12 1.49	23 1.49	67 1.49	18 1.49	8.5 1.49	.07 +.07	-- 14.0	182 200	33 0	3.8 3.8	
05/09/75	5121 5806	255/24E-294n1	M	7.6 21	F C	7.5 7.5	400 2900	117 22.49	4.7 1.12	0 0.00	52 1.00	468 1.00	623 17.97	16.6 1.27	.04 +.04	-- 37.0	1718 1755	1163 1119	1.5 1.5			
04/08/75	5017 5806	255/24E-30Hn1	M	8.0 27	F C	4.6 4.6	200 1	1.1 1.99	.1 1.96	65 3.33	-- 1.67	20 7.9	48 21	10 1.0	11 1.0	.9 .01	.12 +.12	-- --	113 112	0 0	24.1 24.1	
05/15/75	5121 5806	255/24E-35En1	M	7.3 23	F C	7.4 7.4	750 750	4.19 4.19	.4 .03	70 3.44	2.3 0.00	0 1.00	45 1.00	202 1.00	41 1.00	30.2 1.00	.01 +.01	-- 28.0	501 529	212 174	2.4 2.4	
06/06/75	5121 5806	255/24E-35Rn1	M	7.6 24	F C	8.6 A.6	250 17	7.3 1.7	.1 1.79	41 .02	.7 1.43	13 1.43	26 1.43	41 1.43	18 1.43	11.3 1.43	.07 +.07	-- 21.0	152 167	19 0	4.1 4.1	
06/06/75	5121 5806	255/24E-36Gn1	M	7.7 25	F C	7.5 7.5	190 1.00	20 1.00	.1 1.00	64 2.78	1.3 0.03	1.3 0.00	0 1.00	32 1.00	64 1.00	62 1.00	12.1 1.20	.06 +.06	-- 16.0	240 256	51 25	3.9 3.9
06/09/75	5121 5191	255/25E-04Cn1	M	7.4 7.4	F 4.00	7.3 1.05	37 1.47	5.3 1.37	.1 1.37	36 1.48	4.4 1.11	0 0.00	141 2.00	18 1.00	44 1.00	7.5 1.00	.05 +.05	-- --	242 241	118 118	3 5	
06/09/75	5121 5191	255/25E-21Jn1	M	7.6 7.6	F 2300	7.5 13.4	262 60	14 1.16	1.0 1.00	170 7.40	4.0 1.15	0 0.00	3.41 1.00	750 1.00	150 1.00	8.9 1.14	.10 +.10	-- --	1480 1473	712 541	2.8 2.8	
06/09/75	5121 5191	255/25E-044C2	M	7.9 7.9	F 4.30	7.3 1.35	27 2.5	5.3 3.48	.1 1.45	52 1.45	4.4 1.11	0 0.00	2.31 1.00	141 1.00	18 1.00	4.4 1.00	.05 +.05	-- --	316 315	86 0	3.8 3.8	
06/09/75	5121 5191	255/25E-10F3	M	7.6 2200	F 2.5	7.12	51 44	115 44	217 4.4	6.1 1.16	0 1.00	0 1.00	145 1.00	480 1.00	174 1.00	8.0 1.13	.25 +.25	-- --	1280 1276	601 397	3.9 3.9	
06/09/75	5121 5191	255/18E-14Hn1	M	7.6 6000	F 1.00	300 11.49	310 30.99	7.0 3.37	1.0 1.46	710 4.6	14 1.00	0 1.00	208 1.00	1760 1.00	534 1.00	151 1.00	3.00 1.05	-- --	3810 3805	1409 1638	86 7.3	
06/09/75	5121 5191	255/21E-14Hn1	M	7.7 6400	F 15.47	310 21	179 20	970 4.68	12 1.00	0 1.00	470 1.00	2200 1.00	662 1.00	3.1 1.01	3.40 1.05	-- --	4770 4771	1511 1125	10.9 10.9			
03/31/75	5017 5806	255/22E-16Gn1	M	4.3 340	F A.6	7.0 1.02	4.3 0.05	70 1.05	4.1 1.05	7.0 1.05	4.4 1.05	0 1.00	1.00 1.00	120 1.00	2200 1.00	42 1.00	5.4 1.00	.23 +.23	-- --	200 198	11 0	8.8 8.8
04/11/75	5121 5191	255/22E-21Vn1	M	1.00 1050	F 1.130	114 5.00	4.1 7.7	7.0 4.2	1.0 1.00	108 4.70	7.5 1.19	0 1.00	1.00 1.00	121 1.00	287 1.00	110 1.00	1.1 1.00	.10 +.10	-- --	758 695	320 221	2.6 2.6
06/09/75	5121 5191	255/22E-27Dn1	M	1.00 2900	F 6.79	136 2.7	2.7 1.00	410 7.72	4.4 1.11	0 1.00	2.9 1.00	7.4 1.21	0 1.00	340 1.00	650 1.00	13 1.00	.65 +.65	-- --	1580 1581	351 290	9.5 9.5	
06/18/75	5017 5806	255/23E-02Hn1	M	1.00 7.6	F 2.6	1.00 C	0.05 9.0	7.0 1.00	0 1.00	3.0 1.00	4.4 1.00	0 1.00	1.00 1.00	52 4.8	5.0 3.0	8.1 1.0	2.8 1.05	.06 +.06	-- --	1177 1171	608 583	3.2 3.2
02/03/75	5017 5806	255/23E-04Jn1	M	2.42 22	F C	7.9 7.9	242 1.00	4.7 1.00	1.79 1.00	-- 0.00	0 0.00	0 0.00	29 1.00	145 3.02	583 16.45	7.1 1.01	.02 +.02	-- --	1177 1171	608 583	3.2 3.2	
01/04/75	5017 5806	255/23E-05Pn1	M	4.3 22	F C	7.9 R+R	7.0 2.3	1.1 1.01	4.4 1.01	-- 0.00	13 1.00	25 1.00	35 1.00	13 1.00	.9 .01	.03 +.03	-- --	130 124	11 0	5.7 5.7		

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃ SO ₄ CL NO ₃										MILLIGRAMS PER LITER				MILLIGRAMS PER LITER			
				%	%	%	%	%	%	%	%	%	%	%	R	F	TDS	TH	REM		
		CENTRAL VALLEY SAN JOAQUIN VALLEY																			
04/28/75	5121 5806	265/23E-07PRN	M	71 22	F C	7.9 7.9	29 5	3.6 4.70	108 72	1.5 0.4	0 0.0	70 18	103 2.14	112 3.16	2.1 0.03	.01 16.0	394 410	88 30	5.0		
01/07/75	5121 5806	265/23E-09PRN	M	71 22	F C	7.2 7.2	43 38	+1 +0.1	80 3.48	-- +2	0 0.0	37 .61	50 1.04	140 3.97	3.5 +0.6	+0.3 1	338 336	108 78	3.4		
01/09/75	5121 5806	265/23E-13FRN	M	77 25	F C	9.1 9.1	2.5 1.12	.0 +0.0	35 1.42	-- .68	20 .34	21 .56	27 .15	1.8 .15	.9 +0.1	+0.02 1	98 98	6 0	6.1		
02/03/75	5121 5806	265/23E-13H01	M	77 25	F C	9.1 9.1	14 2.6	+1 +0.1	41 7.1	-- .66	20 2.0	12 1.00	46 4.0	19 2.2	4.5 3	+0.03 3	-- 3	155 154	36 0	3.0	
01/09/75	5121 5806	265/23E-14H01	M	77 25	F C	8.1 8.1	17 2.8	.2 1	50 7.1	-- .65	1.6 2	43 2.3	59 1.23	36 1.22	3.5 +.06	+0.05 2	-- 2	190 189	44 6	3.3	
04/08/75	5121 5806	265/23E-17R01	M	75 24	F C	9.1 9.1	200 200	+1 +0.0	71 1.96	+1 +.43	25 12	14 2.3	14 2.9	21 .62	.9 +.01	+1.12 1	-- 1	116 115	0 0	24.1	
01/17/75	5121 5806	265/23L-25R01	M	74 23	F C	8.0 8.0	73 3.64	.6 +.05	56 2.46	-- 1.40	0 +.00	37 1.0	73 1.52	136 3.85	13.6 +.22	.05 4	-- --	373 371	185 154	1.0	
01/17/75	5121 5806	265/23E-25F01	M	70 24	F C	8.9 8.9	3.3 1.16	.0 +.00	35 1.92	-- +.57	13 2.7	38 1.72	24 .50	2.5 .07	1.8 +.03	+0.03 2	-- 2	100 99	8 0	5.3	
03/26/75	5121 5806	265/23E-25R01	M	77 25	F C	9.2 9.2	2.4 1.12	.0 +.00	30 1.31	-- +.92	25 1.45	10 1.15	9.0 1.19	7.4 .21	3.3 +.05	+0.03 3	-- 3	84 83	6 0	5.3	
01/18/75	5121 5806	265/23E-27R01	M	74 23	F C	8.0 8.0	6.4 3.32	.0 +.32	45 1.96	-- +.57	1.8 2.7	46 1.72	40 .83	23 .57	.9 +.01	+0.02 1	-- 1	140 139	16 0	4.9	
03/27/75	5121 5806	265/23E-29J01	M	76 24	F C	9.3 9.3	2.0 1.10	.0 +.00	36 1.31	-- +.94	29 3	10 1.16	9.0 1.19	7.4 .21	3.3 +.05	+0.05 2	-- 2	93 94	5 0	7.0	
03/27/75	5121 5806	265/23E-32J02	M	73 23	F C	7.7 7.7	2.50 12.48	.2 +.18	520 22.62	-- +.00	0 35	52 1.05	870 11.14	621 17.53	31.6 +.51	.28 1	-- 1	2391 2321	634 591	9.0	
01/20/75	5121 5806	265/23E-34U01	M	76 24	F C	8.8 8.8	6.8 3.34	.0 +.00	43 1.87	-- +.77	23 37	19 1.31	33 1.36	14 2.9	2.6 +.04	+0.04 2	-- 2	133 132	17 0	4.5	
01/20/75	5121 5806	265/23E-35F01	M	74 23	F C	8.2 8.2	10 5.3	.0 +.00	53 2.31	-- +.05	1.0 2.0	41 1.54	69 1.44	23 +.57	1.8 +.03	+0.02 1	-- 1	181 180	27 0	4.5	
06/11/75	5121 5806	265/23E-35R01	M	75 24	F C	8.5 8.5	2.9 1.45	.1 +.01	63 2.74	+.9 +.02	8.6 7.0	25 1.41	93 1.94	52 1.48	6.5 +.10	+0.04 2	-- 2	266 281	73 39	3.2	
01/20/75	5121 5806	265/23E-36R01	M	75 24	F C	8.9 8.9	6.9 1.34	.0 +.00	40 1.74	-- +.84	10 16	37 1.39	39 1.81	9.9 +.28	3.6 +.06	+0.03 3	-- 3	129 128	17 0	4.2	
06/06/75	5121 5806	265/24E-02G01	M	75 24	F C	8.7 8.7	4.9 2.24	.1 +.01	38 1.65	.5 .01	14 1.68	24 1.62	30 1.78	9.9 +.14	8.5 +.21	+0.04 7	-- 7	220 140	118 13	4.7	
02/03/75	5121 5806	265/24E-02H01	M	76 24	F C	7.6 7.6	6.5 1.39	.1 +.01	32 1.39	-- 1.81	0 1.81	59 1.55	22 1.46	9.6 1.27	3.5 +.06	+0.03 3	-- 3	104 103	17 0	3.4	
12/19/74	5121 5806	265/24E-05J01	M	7n 21	F C	7.2 7.2	50 7.50	.3 +.02	70 3.65	-- 1.45	0 1.55	42 1.55	170 1.54	42 1.19	14.3 +.23	.05 4	-- 4	370 367	126 92	2.7	
12/19/74	5121 5806	265/24E-05R01	M	73 23	F C	8.4 8.4	5.0 2.25	.0 +.00	36 1.57	-- 1.20	6.0 1.11	48 1.43	31 1.45	4.9 1.16	3.6 +.06	+0.03 3	-- 3	111 110	13 0	4.4	

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE#	LAB	TEMP PH	FIELD EC	LABORATORY EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER										PERCENT REACTANCE CL	PERCENT ALKALINITY NO3	S SI02	F SUM	TOS SUM	TH NCM	REM SAR										
						CA	MG	NA	K	CO3	HCO3	504	8	9	10																	
CENTRAL VALLEY SAN JOAQUIN VALLEY																																
01/10/75	5617 5806	265/24E-07R00	M 77 25	F C 7.8	15n 1.2 8	2.4 .00 1.31	.0 1.23 87	.30 1.23 9	= + 0	0 1.23 87	75 12 9	6.0 1.12 4	1.8 +.05 1	.9 +.01 1	.04 +.01 1	--	79 78	6 0	5.3													
06/09/75	5121 5191	265/24E-10P01	M 76 9.0		200 "30	15 1.5 30	.1 .01 1.74	4.0 1.44 6.9	1.5 1.44 21	13 1.44 43	54 54 23	23 24 12	8.6 +.28 12	9 +.24 12	.9 +.01 1	+16 --	129 129	38 0	2.8	5												
01/13/75	5617 5806	265/24E-10R00	M 76 24	F C 8.7	150 1.16	3.2 .00 1.44	.0 1.44 90	.33 1.44 16	-- +.26 1.44	7.8 4.3 4.3	4.3 2.6 33	2.8 1.54 5	2.7 +.08 2	.02 +.04 2	--	97 97	8 0	5.1														
06/09/75	5121 5191	265/24E-12P01	M 76 9.0		230 "31	15 1.5 31	.5 .04 1.57	3.6 1.57 6.6	1.0 1.42 1	33 1.42 25	40 4.0 19	24 1.50 9	8.2 +.23 4	6.6 +.11 4	+18 --	145 144	40 0	2.5	5													
06/09/75	5121 5191	265/24E-12R01	M 76 8.1		240 "35	7.0 1.27	.3 .02 1.61	3.7 1.61 79	2.3 1.61 3	0 1.61 00	101 1.61 71	20 1.61 18	6.2 1.42 7	6.2 1.10 7	+24 +.10 7	--	130 129	19 0	3.7	5												
01/13/75	5617 5806	265/24E-13H01	M 76 24	F C 8.4	180 1.30	6.0 .02	.2 0.12	3.5 1.52	-- 1.52	5.1 1.52	53 4.7	30 5.2 33	4.6 1.52 7	4.5 1.07 4	.03 +.07 4	--	112 111	16 0	3.8													
01/10/75	5617 5806	265/24E-15N00	M 76 22	F C 7.7	250 1.30	1.9 .03	.4 1.52	3.5 1.61	-- 1.61	0 1.61	64 4.1	42 3.4	15 1.44	11 1.12 7	.08 +.18 7	--	156 155	50 0	2.2													
01/10/75	5617 5806	265/24E-16J02	M 77 25	F C 8.2	160 1.17	5.6 .27	.0 1.31	3.0 1.31	-- 1.31	0 1.31	22 83	5.0 5.6	3.5 1.36	4.3 1.36 57	.03 +.07 16	--	89 59	14 0	3.6	T												
01/10/75	5617 5806	265/24E-16P00	M 75 24	F C 7.8	140 1.10	2.7 .13	.0 1.00	2.8 1.26	-- 1.26	0 1.26	73 86	5.0 1.10	2.5 1.07	1.7 1.07 5	+05 +.03 2	--	75 76	7 0	4.7													
01/10/75	5617 5806	265/24E-16K02	M 75 8.1		150 1.13	3.9 .19	.1 1.01	2.9 1.26	-- 1.26	0 1.26	74 82	5.0 1.10	4.6 1.13	2.6 1.04 9	+07 +.04 3	--	81 82	10 0	4.0													
01/10/75	5617 5806	265/24E-17M00	M 76 24	F C 8.4	150 1.21	4.3 .21	.0 1.00	3.0 1.31	-- 1.31	9.9 1.31	52 5.6	6.0 1.56	6.4 1.18	2.6 1.04 12	+02 +.04 3	--	85 85	11 0	4.0													
01/10/75	5617 5806	265/24E-18H00	M 77 25	F C 8.2	150 1.04	2.1 .00	.0 1.00	3.3 1.44	-- 1.44	33 94	52 6.1	21 5.6	1.1 1.44 28	.02 +.03 2	--	92 91	5 0	6.3														
01/15/75	5617 5806	265/24E-19H00	M 77 25	F C 8.7	140 2.1	8.0 .01	.0 1.01	3.2 1.39	-- 1.39	12 77	54 23	33 30	14 1.29	17 1.29 16	.02 +.07 4	--	107 105	21 0	3.1													
01/15/75	5617 5806	265/24E-21C00	M 77 25	F C 8.6	150 1.13	3.8 .19	.1 1.01	3.0 1.31	-- 1.31	10 1.31	43 23	7.0 1.36	9.2 1.70	.05 +.26 10	--	85 84	10 0	4.1														
01/14/75	5617 5806	265/24E-21M00	M 77 25	F C 8.7	130 1.10	2.8 .14	.0 1.00	2.8 1.22	-- 1.22	15 90	36 4.5	7.0 1.62	2.1 1.15 4	+01 +.03 3	--	77 76	7 0	4.0														
01/14/75	5617 5806	265/24E-21R00	M 76 24	F C 8.3	130 1.16	3.3 .00	.0 1.00	2.7 1.17	-- 1.17	8.7 88	56 20	7.0 1.26	5.3 1.15 63	+03 +.05 10	--	76 76	8 0	4.1														
01/14/75	5617 5806	265/24E-22F80	M 75 24	F C 8.0	160 1.23	6.8 .34	.2 0.02	2.6 1.13	-- 1.13	1.8 1.76	56 4	16 1.26	5.3 1.25 92	+03 +.03 2	--	86 85	16 0	2.7														
03/26/75	5617 5806	265/24E-23H01	M 73 23	F C 8.6	180 1.30	6.1 .30	.1 0.03	3.1 1.35	-- 1.35	7.8 1.81	35 15	19 1.26	9.6 1.27 34	+26 +.27 24	--	104 103	15 0	3.4														
05/14/75	5121 5806	265/24E-23R80	M 78 24	F C 8.0	190 2.1	8.0 .40	.1 0.01	3.4 1.48	-- 1.48	0 1.48	56 0.90	25 27	11 1.52	8.3 1.31 16	+01 +.13 7	--	117 130	21 0	3.3													
04/14/75	5617 5806	265/24E-27P01	M 76 24	F C 8.9	190 1.45	9.0 .45	.4 0.03	3.1 1.35	-- 1.35	13 1.81	35 15	19 1.44	15 1.44 40	+01 +.03 2	--	114 107	24 0	2.7														

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE LAB	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER						MILLIEQUivalents per liter		MILLIEQUALENTS PER LITER								
				CA	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	F	TDS	TN	SUM	NCH	SiO ₂	REH		
CENTRAL VALLEY SAN JOAQUIN VALLEY																				
01/16/75	5617 5806	76 75	F C	2.6 2.4	.0 .01	26 1.3	-- 0.00	0 1.11	68 1.11	5.0 .10	1.8 .05	2.6 .04	.03 3	-- --	70 71	7 0	4.4			
01/15/75	5617 5806	76 75	F C	1.2 8.7	.0 .01	30 150	-- 1.31	6.9 1.31	43 1.39	34 1.71	4.6 .13	1.8 .03	.02 2	-- --	109 31	31 0	E S			
01/17/75	5617 5806	76 75	F C	4.7 8.5	.0 .23	30 150	-- 1.31	11 .38	45 1.74	10 .21	5.7 .16	4.3 .07	.02 4	-- --	89 88	12 0	3.8			
06/09/75	5121 5191	76 8.7	F 190	10 .50	.5 .04	32 1.39	1.0 2	13 1.29	54 1.44	17 .21	19 .16	5.3 .09	.12 4	-- --	126 125	27 0	2.7			
06/09/75	5121 5191	76 8.6	F 220	7.0 .35	.1 .01	33 1.64	1.3 2	13 1.44	54 1.44	18 .37	9.6 .27	4.9 .08	.27 4	-- --	114 114	18 0	3.4			
06/09/75	5121 5191	76 8.2	F 210	11 .55	.1 .01	35 1.52	1.7 .04	6.6 2	54 1.22	21 .44	17 .20	8.0 .13	.04 6	-- --	128 128	28 0	2.9			
05/15/75	5121 5191	76 8.5	F 210	11 .55	.7 .05	28 1.22	1.0 0.4	15 0.46	54 1.20	16 1.39	7.5 .33	6.2 .21	.17 .10	-- 5	118 117	30 0	2.2			
06/06/75	5121 5191	76 8.5	F 210	15 .75	.6 .05	28 1.22	1.2 0.3	26 0.37	54 1.20	18 1.37	4.6 .37	4.9 .18	.17 13	-- 5	128 128	40 0	1.9			
05/09/75	5121 5806	76 77	F C	11 3.5	.0 .00	30 1.31	1.0 1.03	12 0.29	32 1.43	14 .29	7.1 .20	3.1 .05	.01 15.0	-- 15.0	88 102	9 0	4.4			
06/09/75	5121 5191	76 7.7	F 280	21 1.05	1.5 .12	34 1.48	3.0 .08	0 .00	107 1.75	17 .35	9.9 .28	19.0 .31	.13 12	-- --	159 156	59 0	1.9			
06/09/75	5121 5191	76 7.6	F 220	20 1.00	1.4 .12	32 1.39	2.8 0.54	0 3	87 1.43	24 .56	9.9 .28	19.5 .31	.19 12	-- --	153 153	56 0	1.9			
06/09/75	5121 5191	76 7.7	F 1000	22 1.10	.9 1	192 8.35	12 3	12 0.00	260 4.74	215 4.49	87 2.47	5.3 .09	.78 1	-- --	681 678	59 0	10.9			
06/09/75	5121 5191	76 7.5	F 1340	103 5.14	7.2 1.59	153 8.86	7.6 1.19	0 .00	121 1.98	275 5.73	126 3.55	173 2.79	.09 14	-- 41	905 904	287 186	3.9			
06/09/75	5121 5191	76 8.0	F 200	16 .89	.2 1	23 1.53	2.1 0.5	6.6 2.22	74 1.21	17 1.35	5.6 .16	7.0 .11	.11 5	-- --	115 114	41 0	1.6			
06/09/75	5121 5191	76 7.0	F 3600	198 9.88	6.0 2.5	580 12	9.1 6.3	34 1	396 1.14	800 1.74	483 3.44	3.1 36	3.20 3.20	-- --	2380 2365	741 359	9.3			
04/11/75	5050 0930	76 6.4	F 18	275 C	7.6 7.4	6000 755	30 1.50	6.8 5.6	102 4.44	9 .02	0 0.00	63 1.03	112 2.33	120 3.38	.1 .00	20 50	-- --	434 403	103 52	4.4 X
04/11/75	5050 1030	76 6.4	F 25	22E C	8.4 7.7	4500 5210	144 7.19	22 1.81	1000 4.50	0 .06	0 0.00	237 3.88	834 17.36	1060 30.46	10.0 1.48	3.10 1	-- --	3300 3232	449 256	20.5
06/12/75	5050 0900	76 6.8	F 20	22E C	7.4 8.0	17500 18700	494 24.65	56 4.00	4320 187.92	7.2 1.18	0 0.00	256 4.26	3770 78.49	4730 13.39	17.0 1.27	8.30 1	-- --	13600 13526	1450 1245	49.3 E
04/10/75	5050 1045	76 6.8	F 20	22E C	8.4 8.5	18000 21200	330 16.7	6.7 5.51	5160 2.45	6.1 1.16	0 0.00	313 5.13	4650 9.61	5200 114.64	.1 .00	12.0 59	-- --	15000 15579	1100 1443	67.7
04/10/75	5050 1045	76 7.0	F 13	22E C	8.4 8.4	16000 19400	595 29.69	59 5.67	4380 190.53	0 .00	0 0.00	222 152.28	-- 152.28	5400 2.45	34.0 5.95	-- --	-- --	1770 1587	1100 45.3	S

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP PM	FIELD EC	LABORATORY CA	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER						MILLIEQUVALENTS PER LITER							
					MG	NA	K	C03	HCO3	S04	CL	N03	B	S102	F	T05	TH	
CENTRAL VALLEY SAN JOAQUIN VALLEY																		
04/10/75 1140	55050 55050	275/22E-14H04	M	R=0 19000 R=1 24000	353 17.61	81 6.66276	6350 2.23	-- .00	343 5.62	-- 3	6940 195.71	24.0 .39	-- 97	-- --	-- --	1210 933	79.3	X 5
04/10/75 1315	55050 55050	275/22E-14H05	M	7.8 17000 7.9 18500	690 34.43	88 7.24168	3870 35	-- .00	202 3.31	-- 2	4840 136.49	49.0 .79	-- 97	-- 1	-- --	2080 1920	36.9	S
04/10/75 0955	55050 55050	275/22E-14H06	M	7.9 17000 8.0 19700	495 24.70	59 5.67195	4490 32	-- .00	294 4.82	-- 3	4940 139.31	.3 .00	-- 97	-- --	-- --	1520 1279	50.1	S
03/10/75	55066 55066	275/22E-14H01	M	76 F 76 C	38 17.9	1.4 12	320 13.92	-- .00	44 .72	111 2.14	458 12.92	5.0 .08	.51 --	-- --	961 956	101 65	13.9	
01/21/75	55017 55066	275/23E-01P00	M	75 F 75 C	8.4 8.5	1.1 1.2	41 1.78	-- .00	7.8 .26	35 .26	47 .56	1.3 .37	3.4 .05	.03 --	-- --	140 139	23 0	3.8
04/18/75	55017 55066	275/23E-01P01	M	77 F 75 C	10 9.2	1.1 .50	49 2.13	-- .01	16 1.81	27 2.0	49 1.02	20 .57	6.6 .11	.31 --	-- --	166 165	26 0	4.2
01/21/75	55017 55066	275/23E-02H00	M	78 F 76 C	2.0 9.0	1.0 .10	34 1.84	-- 1.00	18 1.82	47 1.70	5.0 .10	1.8 .05	2.6 .04	.03 --	-- --	89 87	5 0	6.6
05/12/75	55121 55066	275/23E-02H01	M	78 F 78 C	7.0 8.7	1.0 .35	42 1.83	1.0 .03	11 1.03	44 1.7	28 1.80	18 .51	1.1 .02	.01 1.00	-- 18.0	130 148	18 0	4.4
01/21/75	55017 55066	275/23E-03F00	M	77 F 75 C	2.3 8.9	1.0 .11	36 1.57	-- 1.93	18 3.9	42 4.9	13 1.0	4.2 .10	.9 1.0	.04 --	-- --	95 95	6 0	6.5
01/21/75	55017 55066	275/23E-03P01	M	77 F 75 C	15 8.5	1.0 .75	75 3.26	-- 1.81	10 3.8	43 7.0	102 2.12	29 .84	3.4 .05	.10 --	-- --	258 257	39 5.2	
01/21/75	55017 55066	275/23E-04H00	M	77 F 75 C	25 8.5	1.0 .75	75 3.26	-- 1.81	10 3.8	52 13	176 1.42	50 .08	5.2 1	.15 --	-- --	412 409	64 5	6.3
01/21/75	55017 55066	275/23E-05H01	M	7.4 5100 7.4 17	163 1.13	1.5 12	940 4.09	-- 1.00	0 1.01	37 1.77	85 1.66	1660 2.00	2.6 1.0	1.40 --	-- --	2877 2872	414 302	20.1
06/06/75	55121 55066	275/23E-14H00	M	77 F 75 C	90 7.7	2.0 1.54	260 11.31	2.6 .07	0 0.00	135 2.21	430 8.33	184 5.20	12.2 .20	.52 1	-- --	1017 1025	229 118	7.5
06/09/75	55121 55066	275/23E-14P02	M	7.8 2500 7.8 30	148 1.39	1.1 0.94	385 16.65	3.0 .08	0 0.00	124 2.03	698 14.53	259 7.31	25.5 .41	.07 1.0	-- 14.0	1582 1596	375 273	6.7
02/26/75	55121 55066	275/23E-16N00	M	74 F 72 C	26 7.4	5.5 1.04	240 10.44	-- 1.89	0 0.00	47 1.77	37 10.34	366 .01	.5 1.0	.55 --	-- --	699 694	67 29	12.8
05/15/75	55121 55066	275/23E-16H00	M	7.5 1790 7.5 13	46 1.04	5.5 15.23	350 1.12	4.5 .00	0 0.79	48 4	30 52	575 16.22	.5 .01	.13 1.0	-- 9.0	1031 1040	117 78	14.1
07/19/75 1415	55050 55050	275/23E-19H01	M	72 F 72 C	129 7.8	17 4.44	900 39.15	1.8 .05	0 0.00	384 6.29	658 13.70	982 27.69	59.0 .95	2.80 --	-- --	3030 2938	393 78	19.8
04/10/75 1450	55050 55050	275/23E-19H02	M	66 F 66 C	121 7.9	25 5.05	1120 6.04	2.5 .06	0 0.00	402 7.40	709 48.72	1170 14.76	36.0 .98	3.20 --	-- --	3430 3424	405 10	24.2
04/10/75 1525	55050 55050	275/23E-19H03	M	8.0 4500 8.0 4950	114 5.69	26 2.14	940 40.89	-- 1.04	0 0.00	294 4.82	1170 32.49	70.0 1.13	-- --	-- --	-- --	390 151	20.7	S
04/10/75 1545	55050 55050	275/23E-19H04	M	8.0 4350 8.0 4950	82 4.09	23 1.59	1000 43.50	-- 1.04	0 0.00	273 4.47	1110 31.20	69.0 1.11	-- --	-- --	-- --	299 76	25.2	S

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP PN EC	FIELD LABORATORY	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃ SO ₄ CL NO ₃	MILLIGRAMS PER LITER		MILLIGRAMS PER LITER		REM				
					PERCENT REACTANT	VALUE	R	F	TOS	TH	SUM	NCH	SAR
CENTRAL VALLEY SAN JOAQUIN VALLEY													
04/10/75 1435	5505 5509	27°C/23E-19H05	M	B+0 4200 67 B+0 4710 3.39 7 1+23 42.98 3 90	-- -- 0 0.00	365 5.98 17	-- 2A+20 81	1000 34.0 2A+20 .55 2	-- --	228 0	28.4	5	
04/10/75 1510	5505 5509	27°C/23E-19H06	M	B+0 4500 98 7.9 4750 4.89 11 1+64 39.67 4 Ab	-- -- 0 0.00	284 4.65 13	-- 29+0.5 84	1030 44.0 1+03 3	-- --	329 94	21.9	5	
04/10/75 1535	5505 5509	27°C/23E-19H07	M	B+0 5000 117 7.9 5740 5.84 10 2+14 50.46 4 Ab	-- -- 0 0.00	404 6.62 16	-- 34+6.9 82	1230 48.0 .77 2	-- --	399 68	25.3	5	
04/11/75 1120	5505 5509	27°C/23E-20Jn1	M	66 F 6000 367 19 C 7.7 6410 18.31 25 2 73	2+0 0.05	363 5.95 8	2390 49.76 67	500 72.0 1+16 2	4+40 --	5020 4585	999 701	16.8	E
05/10/75	5512 5506	27°C/23E-25C80	M	76 F 1610 92 24 C 7.9 4.59 29 1 70	+8 .07	260 11.31 11	4+4 0.00 1.46	490 1+20 1+20 4.13 2	+44 12+0	1055 1067	233 160	7.4	
03/08/75	55017 55006	27°C/23E-27J01	M	77 F 1290 42 25 C 7.8 2.10 10 Ab	+7 .06	250 10.46 4.3	-- 0.00	117 276 1.92 5.75 15 44	188 10.8 5.21 +1.1 40 1	+91 --	831 826	108 12	10.5
05/10/75	55121 5506	27°C/23E-28A00	M	76 F 590 23 24 C 8.6 1.19	+0 0.00	110 4.79 1.00	1.6 0.04	12 25 +1 4.1 7 53	152 66 3.16 1.49 32 1	.01 +0.08	383 395	58 16	6.3
04/11/75 1715	5505 5509	27°C/23E-34C01	M	76 2200 17 8.3 2540 .83	2+1 .17	547 4.66 24.66	+7 0.02	764 258 12.52 5.37 49 21	233 97.0 6.57 1.56 6 6	3.10 --	1530 1554	51 0	34.5
04/23/75 1715	5505 5509	27°C/23E-36A02	M	8.1 827 51 2.35 2.35	+0 0.00	120 5.67 5.67	9 0.02	64 208 1.05 4.33 14 2.09	74 11.0 +18 2	.60 --	532 497	123 75	4.8
06/05/75	55121 55006	27°C/24E-06F00	M	77 F 170 4+2 25 C 8.8 1.21	+1 0.01	76 1.05 1.05	+4 0.05	19 23 1.48 3.81 1 22	15 38 1.29 1.17 18 5	+7 +0.08	100 117	11 0	4.5
01/21/75	55017 55006	27°C/24E-06J00	M	76 F 170 5+6 24 C 8.4 1.28	+1 0.01	32 1.05 1.05	-- 0.00	69 47 0.23 1.77 14 46	12 13 2.59 3.4 15 23	+0.2 +0.05	97 97	14 0	3.7
06/05/75	55121 55006	27°C/24E-08R01	M	77 F 160 3+0 25 C 8.0 1.15	+1 0.01	32 1.05 1.05	+1 0.00	18 23 0.25 1.27 16 17	12 9.6 2.27 3.7 4 4	.04 +0.06	90 105	8 0	5.0
05/22/75	55121 55006	27°C/24E-08F00	M	76 F 140 4+3 24 C 8.8 1.21	+0 0.00	28 1.05 1.05	9 0.02	45 5.0 1.74 1.10 1 4.0	20 1.0 1.06 1.02 7 4	.01 +0.02	80 94	11 0	3.7
06/04/75	55121 55091	27°C/24E-16P01	M	13 +1 8.9 220 .65	+1 0.01	38 1.05 1.05	1+1 0.00	19 54 1.45 0.98 1 51	18 16 0.39 1.37 15 5	.34 --	137 136	33 0	2.9
03/05/75	55121 55006	27°C/24E-19N00	M	2+0 1.10 24 C 9.1 1.10	+0 0.00	34 1.05 1.05	-- 0.00	21 29 1.72 1.48 44 29	5.0 10 2.48 1.29 6 2	.03 --	89 90	5 0	6.6
03/10/75	55121 55006	27°C/24E-27Rn1	M	2+2 1.10 23 C 7.8 1.05	+2 0.00	32 1.05 1.05	-- 0.00	0 60 1.72 1.98 44 36	23 26 1.68 1.76 18 30	.02 --	163 159	61 12	1.8
01/28/75	55121 55006	27°C/24E-27Rn1	M	26 +3 1.05 23 C 7.7 1.05	+3 0.00	32 1.05 1.05	-- 0.00	0 69 1.71 1.71 41 25	34 26 1.76 1.21 7 7	.05 --	159 167	67 11	1.7
01/28/75	55121 55006	27°C/24E-28R00	M	2+0 1.05 24 C 8.2 1.05	+0 0.00	35 1.05 1.05	-- 0.00	0 73 1.70 1.70 40 60	5.0 2.6 1.65 1.64 5 33	.04 --	113 111	23 0	3.2
01/28/75	55121 55006	27°C/24E-28R00	M	4+3 1.05 24 C 8.3 1.05	+0 0.00	30 1.05 1.05	-- 0.00	9+0 56 1.71 1.71 14 60	6.0 5.7 1.62 1.61 8 10	.03 --	87 85	11 0	4.0
01/28/75	55121 55006	27°C/24E-28R00	M	14 +1 1.05 24 C 7.9 1.05	+1 0.00	35 1.05 1.05	-- 0.00	0 58 1.72 1.72 41 28	31 21 1.75 1.62 7 3	.04 --	138 136	37 0	2.5

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

TIME	SAMPLE LAB	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN PERCENT REFRACTANCE VALUE										MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER			
				CA	MG	NA	K	C03	HCO3	SO4	CL	NOS3	B	F	T02	T05	TH	NCH	SAR		
CENTRAL VALLEY SAN JOAQUIN VALLEY																					
03/16/75	5617 5606	275/24E-32001	M 77 25	F 8.7 C	8.0 *22	+1 0.1	73 1.44 78	-- 1	10 34 18	35 57 31	27 56 30	12 15 19	2.5 +0.4 2	.05 --	--	112 110	20	3.2			
06/11/75	5121 5606	275/24E-33480	M 75 24	F 7.7 C	10 *50	+0 0.0	34 1.48 74	1.3 0.1	0 0.00	43 70 35	24 50 25	26 50 37	3.7 +0.6 3	.06 16.0	--	121 137	25	3.0			
06/09/75	5121 5191	275/25E-030101	M														136 136	69	1.3		
06/20/75	5121 5191	275/25E-25A01	M														224 223	149 78	0.9		
06/20/75	5121 5191	275/25E-27J01	M														224 223	149 78	0.9		
06/20/75	5121 5191	275/25E-27J01	M														279 278	166 89	0.8		
06/09/75	5121 5191	275/25L-2HF01	M														203 203	117 34	5		
06/09/75	5121 5191	275/26L-02101	M														203 203	117 34	5		
06/09/75	5121 5191	275/26L-02101	M														208 207	15 0	8.1		
06/09/75	5121 5191	275/26E-1EL01	M														407 406	290 207	0.9		
06/09/75	5121 5191	275/26E-1EL01	M														407 406	290 207	0.9		
06/20/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/20/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101	M														701 700	448 360	0.8		
06/09/75	5121 5191	275/26E-1H0101																			

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP RH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER										MILLIGRAMS PER LITER								
				CA	MG	NA	K	C03	HCO3	SO4	CL	NO3	S102	R	F	T05	T07	SUM	NCH	SAR	REH	
CENTRAL VALLEY SAN JOAQUIN VALLEY																						
04/08/75	285/24E-15hn1		H	77	F	8.6		11	+1	.45	--	7.8	.40	.18	.45	1.9	+14	--	152	28		
	5617			25	C			.55	+01	1.96		.26	.66	.37	.27	.03		--	149	0	3.7	
	5806			26				.22		.78		.10	.25	.14	.49	.01						
05/10/75	285/24E-21CRO		H	78	F			+0	+0	.24	.9	0	.54	.14	.18	.5	+01	--	99	10		
	5121			26	C	R.2		18n	.20	1.48	.02	.80	.69	.29	.51	.01	11+0	109	0	4.7		
	5806			26				.12		R7	1		.52	.17	.30	.01						
04/21/75	285/24E-34J01		H	78	F	9.0		140	+1	.00	+0	.15	--	12	.33	.50	.10	.06	+17	--	89	
	5617			26	C							1.62	+3	.54	.10	.52	.01		--	88	0	30.5
	5806											.00	.27	.34	.06	.33	.01					
06/20/75	285/25E-0PK1		H	5121				100	15	1.45	.58	0	.67	.190	.59	.75	.3	+11	--	529	311	
	5191			7.3	A00			4.99	1.23	1.36	.15	2	.00	1.10	.3.96	.1.66	.1.21	.21	--	523	256	1.1
06/09/75	285/25E-10B01		H	5121				87	6.6	7.0	4.2	0	.94	.165	.39	.43	.1	+09	--	473	244	
	5191			R.1	1000			4.34	.54	3.95	.11	0.0	1.54	3.44	.1.42	.86	.16	12	--	472	167	1.9
06/09/75	285/25E-11E02		H	5121				32	1.1	4.7	3.3	0	.74	.70	.31	.24	.8	+10	--	246	84	
	5191			8.1	350			1.60	+09	2.44	.00	0.0	1.21	1.46	.2.9	.40	.22	10	--	246	24	2.2
06/20/75	285/25E-12F01		H	5121				200	10	R3	T.0	0	.94	.450	.102	.101	.11	--	1020	623		
	5191			7.0	176n			0.90	2.17	3.61	.18	0.0	1.54	9.37	.2.88	.1.63	.11	--	1019	546	1.4	
06/09/75	285/25E-14D03		H	5121				240	6.3	1.31	5.4	0	.74	.408	.188	.31	.0	+04	--	1060	645	
	5191			7.0	270n	12.30		.52	5.70	.15	0.0	0.0	1.21	8.49	.5.30	.55	.3	--	1055	585	2.2	
06/09/75	285/25E-21RA0		H	5121				122	1.7	1.19	4.7	0	.67	.207	.207	.22	.1	+15	--	503	312	
	5191			7.7	136n	6.03		.14	5.48	.12	0.0	1.10	4.31	.5.64	.36	.3	710	257	2.9	T		
06/09/75	285/25E-32Fn1		H	5121				0.0	+1	.63	2.74	+7	.9	.67	.3.0	.53	.5	.58	--	173	20	
	5191			R.5	380			1.40	+01	1.13	A6	.02	1	1.37	.0.10	.06	1.00	.01	--	174	0	6.1
06/20/75	285/26E-19Cn1		H	5121				90	4.5	6.3	5.0	0	.67	.204	.73	.25	.7	+10	--	511	243	
	5191			7.4	760	4.44		.57	2.74	.13	0.0	1.10	4.25	.2.07	.41	.5	.49	188	180	1.8		
06/20/75	285/26E-19Dn1		H	5121				40	1.8	2.18	5.0	3.5	0	.67	.100	.25	.89	+18	--	268	107	
	5191			7.4	440	2.45		.15	2.49	.09	0.0	1.27	.52	.18	.14	.00			262	53	2.1	
05/13/75	285/26E-02Gn1		H	5121				28	+2	1.68	2.01	0	.35	.26	.270	.5	.01	+10	--	511	243	
	5191			7.4	440	1.40		.02	1.73	.13	0.0	1.14	4.54	.2.6	.26	.01			499	188	1.8	
04/21/75	285/23E-0Pjn1		H	5121				104	+2	4.78	--	0	.57	.50	.793	.1.	.00	+36	--	1417	281	
	5191			7.8	260	5.44		.22	1.77	R3	.01		.93	.1.04	.22	.36	.00			234	11.1	
06/09/75	285/24E-01hn1		H	5121				10	+1	36	.9	0	.94	11	1.2	2.2	.21	--	119	25		
	5191			7.7	260	.50		.01	1.57	.02	0.0	1.54	.23	.34	.04	.16	2	--	119	0	3.1	
05/13/75	285/24E-04Ern1		H	5121				10	+0	4.1	2.0	0	-2	.51	.18	4.2	.01	--	147	25		
	5191			7.5	230	.50		.00	1.78	.05	0.0	1.59	.66	.53	.07	.3			155	0	3.6	
06/03/75	285/24E-07R80		H	5121				27	+1	125	2.1	0	.48	.74	.159	1.1	+01	--	412	68		
	5191			26	C	7.8		690	1.35	.01	5.44	.05	.00	.79	1.54	.4.49	.02		421	29	6.6	
06/09/75	285/24E-07Cn1		H	5121				22	+2	129	1.2	0	.67	.85	.160	.4.49	.01	+33	--	437	56	
	5191			7.5	840	1.10		.02	5.61	.03	0.0	1.10	1.77	4.51	.0.0		1		436	1	7.5	
03/25/75	285/24E-10Hn1		H	5121				8.0	+0	4.3	--	6.0	33	37	2	4.2	.01	--	142	20		
	5191			22	C	8.7		240	.40	1.87	R2	9	24	34	.77	.70	.07	3		140	0	4.2
05/13/75	285/24E-14R02		H	5121				4.0	+0	39	1.1	0	.51	.43	.11	.03	.01	--	136	23		
	5191			23	C	7.7		250	.45	1.00	1.70	.03	.00	.84	.90	.32	.12		146	0	3.6	
06/09/75	285/24E-14R02		H	5121				12	+5	4.3	.9	0	.74	.18	.29	.6.6	.21	--	147	32		
	5191			7.7	240	.60		.00	1.87	.02	0.0	1.21	.37	.83	.11	.04			147	0	3.3	

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP FIELD PH EC	FIELD LABORATORY	MINERAL CONSTITUENTS IN PPM	MILLIGRAMS PER LITER										REM		
					CA	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NH ₃	B	TDS SUM	TM NCH	SAR
CENTRAL VALLEY SAN JOAQUIN VALLEY																	
03/25/75	5121 5191	7n 24	H C	248/24E-1RAH1 7.9 5.0	12 .98 12	.3 .02 4.57 RB	105 2.2 1.0	-- 0.0 0.0	0 1.69 1.0	1.3 .10 3.46	125 .10 .01	.5 1.0 0.01	.37 -- --	299 300 0	31 0 8.2		
06/09/75	5121 5191	7n 7.7	H 370	248/24E-19AH1 7.9	9.0 .45 1.2	.1 1.1 0.72	74 1.2 0.7	.5 0.1 0.0	0 1.10 1.0	67 .27 1.26	13 1.27 6	98 .03 6.6	.18 -- 1	230 230 0	23 0 6.7	5	
06/09/75	5121 5191	7n 7.5	H 260	248/24E-27Hn1 7.9	8.0 .40 1.0	.1 0.01 2.00	65 0.02 0.02	.9 0.00 0.00	0 1.10 1.0	67 .71 1.27	34 1.39 1.18	13 .39 1.47	.24 -- 1.8	166 165 0	20 0 4.4	5	
06/09/75	5121 5191	7n 7.4	H 250	248/24E-24Fn1 7.9	14 .60 2.1	.1 0.01 2.26	52 0.01 0.01	1.0 0.00 0.00	0 1.10 1.0	60 .71 1.27	55 1.15 1.21	22 1.25 1.21	.18 -- A	188 188 0	30 0 4.1	E	
06/09/75	5121 5191	7n 7.4	H 480	248/24E-24Fn1 7.9	25 1.25 .30	.3 0.02 0.01	67 2.91 0.01	1.4 0.00 0.00	0 1.10 1.0	67 .71 1.27	103 1.24 1.41	50 1.44 1.30	.44 0.07 0.01	.13 -- 1	285 285 9	64 0 3.7	S
06/09/75	5121 5191	7n 7.6	H 1160	248/24E-30Hn1 7.9	106 1.29 .49	11 9.6 9	103 4.48 4.1	4.0 1.0 1.0	0 0.00 0.00	3.62 4.41 4.61	212 1.00 1.13	51 1.20 1.13	2.2 0.04 0.04	.26 -- --	642 639 65	213 213 2.5	
06/09/75	5121 5191	7n 7.6	H 350	248/25E-07An1 7.9	35 1.75 4.6	.8 0.07 0.02	44 1.91 0.2	2.4 0.00 0.00	0 1.10 1.0	67 1.19 1.28	57 1.19 1.21	36 1.02 1.06	34.5 1.56 14	.13 -- --	244 243 36	91 36 2.0	
06/09/75	5121 5191	7n 7.5	H 440	248/25E-05An2 7.9	57 2.84 .47	.5 0.04 0.04	70 3.05 1.0	3.4 0.00 0.00	0 1.10 1.0	67 1.19 1.28	108 2.25 1.23	42 2.33 2.34	35.4 1.57 9	.12 -- --	405 405 144	2.5 2.5	
06/09/75	5121 5191	7n 7.5	H 440	248/25E-04Jn2 7.9	89 4.44 .64	2.1 0.17 0.02	50 2.18 1.2	4.0 0.00 0.00	0 1.10 1.0	67 1.19 1.27	113 2.45 1.36	177 3.12 1.46	8.9 1.14 2	.29 -- --	408 407 176	231 176 1.4	S
06/09/75	5121 5191	7n 7.6	H 260	248/25E-10Pn2 7.9	25 1.25 .45	.3 0.02 0.01	34 1.08 0.01	1.7 0.00 0.00	0 1.10 1.0	68 1.19 1.28	19 1.00 1.18	24 1.02 1.01	1.3 0.02 0.01	.17 -- 1	140 139 8	64 64 1.9	S
06/09/75	5121 5191	7n 7.7	H 310	248/25E-19Hn1 7.9	27 1.35 .39	.3 0.02 0.01	46 2.00 0.00	1.8 0.00 0.00	0 1.10 1.0	11 1.19 1.28	55 1.15 1.21	24 1.08 1.01	15.9 1.26 1.11	.30 -- --	224 176 60	64 60 2.4	E
06/09/75	5121 5191	7n 7.5	H 460	248/25E-27An1 7.9	59 2.94 .53	1.0 0.14 0.03	55 2.19 1.20	7.8 0.00 0.00	0 1.10 1.0	67 1.19 1.28	95 1.19 1.36	75 1.14 1.29	17.7 1.29 5	.10 -- --	342 341 100	64 64 1.9	S
06/09/75	5121 5191	7n 7.6	H 340	248/25E-28An1 7.9	43 2.19 .55	2.5 0.02 0.01	75 2.16 0.00	2.3 0.00 0.00	0 1.10 1.0	68 1.19 1.28	35 1.15 1.21	12 1.08 1.01	20.4 1.34 8	.22 -- 8	234 233 118	64 60 1.4	S
06/09/75	5121 5191	7n 7.6	H 340	248/25E-28Gn1 7.9	34 1.70 .53	1.7 0.14 0.04	71 1.35 0.00	1.5 0.00 0.00	0 1.10 1.0	61 1.19 1.28	101 2.04 1.24	10 1.08 1.01	6.9 1.19 0.9	.14 -- 3	172 170 56	92 0 3.1	E
06/09/75	5121 5191	7n 7.6	H 230	248/25E-30Pn1 7.9	22 1.10 .31	.3 0.02 0.01	54 2.35 0.00	1.3 0.00 0.00	0 1.10 1.0	74 1.21 1.34	65 1.15 1.38	27 1.16 2.04	16.3 1.28 7	.16 -- 7	224 223 56	64 0 3.1	C
06/09/75	5121 5191	7n 7.7	H 720	248/25E-31Hn1 7.9	72 3.59 .53	1.3 0.11 0.03	70 3.05 0.00	3.2 0.00 0.00	0 1.10 1.0	201 1.21 1.34	100 1.21 1.38	55 1.16 2.04	34.5 1.38 7	.41 -- --	426 424 185	92 21 2.2	S
06/09/75	5121 5191	7n 7.5	H 560	248/25E-31Hn1 7.9	64 3.19 .58	9.3 1.76 1.42	75 1.26 0.00	3.4 0.00 0.00	0 1.10 1.0	73 1.21 1.34	68 1.21 1.38	29 1.16 2.04	34.1 1.38 7	.16 -- --	320 319 198	92 70 1.1	
06/09/75	5121 5191	7n 7.5	H 430	248/26E-02L11 7.9	35 1.75 .34	.9 0.07 0.02	73 3.18 0.00	3.7 0.00 0.00	0 1.10 1.0	74 1.21 1.34	110 1.21 1.37	53 1.16 2.04	21.7 1.35 7	.21 -- 7	335 334 91	91 31 3.3	S
06/20/75	5121 5191	7n 7.4	H 400	248/26E-04An1 7.9	75 1.17 .49	13 2.76 1.07	63 2.76 0.00	5.5 1.14 0.00	0 1.10 1.0	121 1.21 1.34	230 2.29 1.37	26 1.16 2.04	31.9 1.35 6	.39 -- 6	506 505 142	241 142 1.8	S
06/20/75	5121 5191	7n 7.6	H 400	248/26E-07Hn1 7.9	43 2.15 .56	2.1 1.16 1.04	33 2.00 0.00	0 1.10 1.0	74 1.21 1.34	77 1.21 1.37	42 1.16 2.04	21.3 1.34 8	.21 -- 8	260 259 116	95 95 1.3	S	

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLEN LAB	TEMP PM	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN CA MG Na K CO ₃ HCO ₃ SO ₄	MILLIGRAMS PER LITER			MILLIGRAMS PER LITER						
					PERCENT REACTANCE	VALUE	q	F	TDS SUM	TH NCH	SAR	REM		
CENTRAL VALLEY SAN JACOINT VALLEY														
06/20/75	5121	295/26E-08P01	H	100 6.99 6.6	0.5 1.96 7	4.5 26 2	4.7 1.2 0.0	1.07 1.75 2.3	145 3.02 39	78 2.22 2.9	43.0 6.9 9	.33 -- --		
06/09/75	5121	295/26E-16P01	H	51 2.54 5.6	3.2 +26 6	35 1.52 34	3.4 .09 2	0 1.39 3.3	70 1.46 23	34 +.97 q	24.8 +.40 q	.17 -- --		
06/09/75	5121	295/26E-16D01	H	72 3.59 5.9	5.2 +.3 7	4.6 2.00 13	3.8 .10 2	0 1.14 1.87	120 2.50 31	41 1.17 4.1	36.8 .59 10	.28 -- --		
06/09/75	5121	295/26E-17M01	H	104 5.19 6.6	10 +.86 10	52 2.26 2.7	4.1 .10 1	0 1.21 1.78	120 2.50 31	110 3.10 38	37.6 .61 7	.18 -- --		
06/20/75	5121	295/26E-22P01	H	55 2.74 5.2	7.0 1.51 11	4.2 1.33 35	4.3 .11 0	0 1.21 1.48	110 2.29 33	37 1.59 39	6.8 1.59 10	.26 -- --		
06/20/75	5121	295/26E-28H01	H	50 2.50 5.6	4.4 1.34 8	35 1.52 2	3.1 .09 0	0 1.01 1.64	70 1.46 31	37 1.58 22	5.9 1.58 12	.28 -- --		
06/09/75	5121	295/26E-32N03	H	18 +.0 4.5	3.5 .79 15	18 +.03 39	1.0 0.0 2	0 81 1.33	90 1.19 79	5.2 1.3 11	.13 1.3 1	.11 -- --		
06/26/75	5121	295/27E-07J01	H	45 2.25 3.9	2.2 3.39 5.9	78 3.08 1	3.2 .00 0	0 48 1.74	158 3.29 59	44 1.25 21	13.0 2.1 4	.09 -- --		
02/12/75	5701	295/27E-23M01	H	25 1.25 51	1.0 +.33 13	19 .83 14	1.7 .04 2	.5 1.66 1	111 1.66 6.6	14 2.29 12	17 3.0 2	.30 -- --		
10/09/74	5701	295/27E-24N01	H	63 17 C	7.3 227 7.9	25 1.25 249	1.0 +.33 1.25	.08 .04 0	1.7 1.52 1.5	.1 1.52 2	.93 1.27 .06	.13 .37 .06	.40 -- --	
03/24/75	5701	295/27E-25D01	H	22 1.10 5.1	3.0 +.25 1.10	18 .78 76	1.6 .06 2	.2 .01 0	95 1.56 6.64	14 2.29 13	13 .37 1	2.0 -- --		
05/12/75	5701	295/27E-25G01	H	64 16 C	7.8 7.8	26 1.30 53	3.0 +.83 10	.4 .83 3	19 1.67 6.64	.4 1.67 13	6.0 .31 15	.11 .37 4	.1 26.0 --	
08/04/75	5701	295/27E-25G01	H	65 18 C	7.6 7.6	27 1.35 5.4	3.0 +.25 1.0	.4 .83 3	19 1.79 71	.3 .33 13	12 .33 13	4.0 .46 2	.2 21.0 --	
01/13/75	5701	295/27E-25R01	H	65 18 C	7.6 7.6	24 1.48 5.3	5.0 +.41 1.53	.3 .83 1	19 1.75 6.64	.3 1.75 6.6	15 .29 16	3.0 .42 2	-- 22.0 --	
07/07/75	5701	295/27E-26J01	H	65 18 C	7.6 8.0	25 1.25 7.0	2.0 +.78 1.7	.6 .05 2	18 1.54 1	.6 1.54 6.6	15 .31 14	1.0 .42 1	-- 20.0 --	
08/04/75	5701	295/27E-35A02	H	22 18 C	7.5 7.5	20 1.10 5.4	2.0 +.74 8	.6 .05 2	17 1.49 71	.2 1.49 14	11 .29 14	.0 .31 1	-- 20.0 --	
03/24/75	5701	295/27E-35E01	H	26 18 C	7.5 7.5	50 1.30 5.1	5.0 +.41 1.6	.3 .83 12	19 1.79 1	.2 1.79 72	14 .29 12	14 .39 16	.0 .0 --	
08/04/75	5701	295/27E-35G01	H	23 19 F	7.4 7.4	3.0 1.15 5.2	3.0 +.25 11	.1 .05 35	18 1.59 2	.1 1.59 71	14 .29 13	11 .34 1	.0 -- --	
09/09/75	5701	295/27E-36M01	H	47 19 F	7.1	9.0 4.30 2.35	4.0 +.74 1.49	.0 .05 1	25 1.49 1.49	.1 1.49 5.3	137 2.25 13	27 4.6 11	.0 6.0 1	-- 26.0 --
10/18/74	5701	295/27E-36K01	H	29 18 C	7.5 7.5	259 1.45 5.5	4.0 +.33 1.7	.0 .05 26	4.5 1.49 1	.2 1.49 6.67	105 3.72 14	18 .48 19	.0 .0 --	
08/04/75	5701	295/27E-36P01	H	30 19 C	7.5 7.5	287 1.50 5.3	5.0 +.41 1.4	.0 .05 2	20 1.49 31	.2 1.49 6.65	2127 2.08 14	21 .46 19	.0 .0 --	

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE LAB	TEMP PH	FIELD LABORATORY	MINERAL CONSTITUENTS IN CA MG NA K CO ₂ MCUS	MILLIGRAMS PER LITER			MILLIEQUIVALENTS PER LITER			MILLIGRAMS PER LITER					
					C	E	CL	PERCENT REACTANT VAL.	504 CL	N03	B	F	TDS SUM	TH NCH	SAR	
CENTRAL VALLEY SAN JOAQUIN VALLEY																
10/18/74	5701 5701	294/27E-36K2?	M 66 14 C	F 7.4 25A 1.80	30 +33 55	4.0 +.33 12	19 +.05 31	1.9 +.01 2	.2 1.42 1.2	117 35 13	17 +.00 16	15 +.00 1.0	-- 25.0 170	169 0 91	0 0.9	
03/24/75	5701 5701	295/28E-16E01	M 65 18 C	F 7.7 27D 1.20	24 +25 52	3.0 +.05 11	19 +.01 36	1.8 1.56 2	.3 1.50 6.6	95 1.50 14	16 1.33 1.9	15 +.03 1	-- 28.0 156	156 0 72	0 1.0	
08/04/75	5701 5701	295/28E-16H01	M 66 19 C	F 7.7 26I	32 +25 59	3.0 +.05 9	19 +.01 40	1.9 1.45 2	.4 1.95 7.2	119 .37 14	18 +.00 1.4	14 +.00 1.4	-- 20.0 178	178 0 92	0 0.9	
02/12/75	5701 5701	295/28E-16H01	M 71 22 C	F 8.0 33D	38 +27 61	4.0 +.05 11	20 +.02 2A	1.8 1.74 1	.7 1.02 1	106 1.74 1.53	37 .77 2.2	25 +.03 2	2.0 23.0 204	204 24 0.8	114 24	
02/18/75	5701 5701	295/28E-16R01	M 7 21 C	F 8.1 32B	39 +33 6.0	4.0 +.04 10	21 +.03 28	1.5 1.73 1	.9 1.34 1	106 1.73 1.52	38 .79 2.7	24 +.08 2	5.0 22.0 208	208 26 0.9	116 26	
06/04/75	5701 5701	295/28E-1A01	M 78 26 C	F 7.8 714	36 +25 5.8	3.0 1.40 8	23 +.05 2	2.2 1.42 1	.5 1.42 1	107 1.75 1.55	34 .74 22	24 +.00 1	0 20.0 195	195 1 102	1 1.0	
07/07/75	5701 5701	295/28E-16R01	M 78 26 C	F 8.1 27D	27 +1.35 6	2.0 +.16 4.3	27 1.17 2	1.5 1.44 1	.8 1.03 1	89 1.46 1.54	33 1.46 1	18 +.03 1	2.0 14.0 169	168 1 76	1 1.4	
06/04/75	5701 5701	295/28E-17R(1)	M 70 21 C	F 7.9 400	46 +2.30 80	6.0 +.49 13	22 +.07 2	2.7 1.46 1	.6 1.46 1	106 1.74 1.46	42 .87 23	42 1.18 31	0 +.00 1	-- 21.0 235	235 52 0.8	142 52
01/13/75	5701 5701	295/28E-1A02	M 67 19 C	F 7.7 231	25 +1.25 5.2	4.0 +.33 14	18 1.78 32	2.0 +.05 2	.3 1.01 1	89 1.49 1.4	33 1.49 1.4	18 +.03 1	2.0 14.0 1	-- 24.0 150	168 0 78	0 0.9
01/20/75	5701 5701	295/28E-1A03	M 69 21 C	F 7.8 197	20 +1.00 5.0	3.0 +.25 12	17 +.03 37	1.2 1.03 1	.4 1.03 1	85 1.47 1.49	15 1.33 1.45	10 1.31 1	1.0 1.02 1	-- 28.0 135	135 0 62	0 0.9
03/24/75	5701 5701	295/28E-1A03	M 65 18 C	F 7.8 259	27 +1.35 5.4	4.0 +.33 13	18 1.78 31	2.0 +.05 2	.5 1.01 1	85 1.47 1.48	15 1.33 1.48	12 1.31 1	2.0 1.45 1	-- 28.0 165	165 0 86	0 0.9
05/04/75	5701 5701	295/28E-1A02	M 68 26 C	F 7.4 276	31 +1.55 5.5	4.0 +.33 12	20 1.87 21	2.8 1.01 2	.2 1.01 2	114 1.47 1.56	29 1.47 21	12 1.30 1.21	1.0 1.02 1	-- 24.0 180	180 0 94	0 0.9
06/04/75	5701 5701	295/28E-1A02	M 66 19 C	F 7.5 217	25 +1.25 5.5	4.0 +.16 12	18 1.78 2	2.1 +.05 1	.5 1.01 1	107 1.47 1.56	17 1.35 24	16 1.35 32	0 +.00 1	-- 28.0 165	165 0 86	0 0.9
02/12/75	5701 5701	295/28E-1A02	M 73 23 C	F 8.1 541	66 +3.29 6.6	7.0 1.58 12	25 1.85 2	1.8 1.77 1	.6 1.02 1	84 1.48 1.58	82 1.48 27	16 1.36 31	1.0 1.02 1	-- 24.0 137	137 70 0	137 70
03/24/75	5701 5701	295/28E-23G02	M 72 22 C	F 8.1 569	70 +58 6.6	7.0 1.58 11	27 1.87 1	2.1 1.05 1	.5 1.02 1	81 1.49 1.4	77 1.49 32	93 2.34 44	0 +.00 1	-- 28.0 337	337 206 0	206 0.8
05/17/75	5701 5701	295/28E-2nH01	M 76 24 C	F 8.1 215	24 +0.83 4.0	8.0 +.03 2	19 1.20 1	2.0 1.05 1	.7 1.02 1	82 1.48 1.64	82 1.48 16	16 1.39 1.39	1.0 1.00 1	-- 24.0 140	140 60 1.1	140 60
05/05/75	5701 5701	295/28E-20L01	M 72 22 C	F 7.9 496	62 +1.09 7	4.0 +.33 24	25 1.09 2	1.9 1.05 1	.4 1.01 1	84 1.48 1.29	R2 1.48 24	16 1.36 32	7.0 1.02 1	-- 24.0 137	137 172 0	137 124
07/07/75	5701 5701	295/28E-21C01	M 77 25 C	H 8.1 326	39 +1.90 6.1	2.0 1.16 5	23 1.00 32	1.5 1.03 1	.6 1.02 1	85 1.48 1.44	72 1.48 34	29 1.48 27	0 +.00 1	-- 16.0 196	196 104 1.0	196 104
07/07/75	5701 5701	295/28E-21D01	M 78 24 C	H 8.2 327	27 +1.90 6.5	1.0 1.16 5	21 1.00 32	1.5 1.03 1	.7 1.02 1	85 1.48 1.44	72 1.48 34	29 1.48 27	0 +.00 1	-- 16.0 197	197 112 41	196 112
03/24/75	5701 5701	295/28E-21E01	M 76 24 C	F 8.2 23A	27 +1.35 6.0	1.0 1.08 4	18 1.16 19	1.2 1.03 1	.7 1.02 1	85 1.48 1.44	72 1.48 34	29 1.48 27	0 +.00 1	-- 22.0 150	150 14 0.9	150 14
05/05/75	5701 5701	295/28E-21G01	M 78 26 C	F 8.0 244	26 +1.00 5.3	8.0 1.00 1	27 1.02 1	6.0 1.02 1	1.0 1.02 1	85 1.48 1.40	27 1.48 37	26 1.48 26	1.0 1.02 1	-- 16.0 143	143 50 1.7	143 50

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP °C PM	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN PPM CA Mg Na K CO ₃ HCO ₃ SO ₄	MILLIGRAMS PER LITER								MILLIGRAMS PER LITER								
					PERCENT REACTANCE CL NO ₃																
CENTRAL VALLEY SAN JOAQUIN VALLEY																					
01/13/75	5701 5701	295</28E-21L01	H 76 24	F C B+0	31 1.55 61	2.0 +16 6	19 +93 32	+8 +02 1	+5 +02 1	+67 +1.10 1	+40 +83 18	+23 +65 22	+0 +00 +00	-- +2+0	+2+0	172 171	88 38	0.9			
01/13/75	5701 5701	295</28E-29L001	H 76 21	F C 7+8	30 1.50 56	2.0 +16 6	20 +97 34	+4 +04 1	+4 +01 1	+94 +54 60	+22 +56 18	+20 +56 22	+0 +00 +00	-- +1+0	+1+0	166 166	84 6	1.0			
06/04/75	5701 5701	295</28E-29L01	H 76 21	F C 8+2	18 1.55 48	2.0 +00 51	22 +96 2	+3 +03 2	+8 +1.21 1	+74 +31 16	+15 +1.34 18	+12 +00 18	+0 +00 +00	-- +1+0	+1+0	118 118	44 0	1.4			
06/04/75	5701 5701	295</28E-29P01	H 76 21	F C 8+2	23 1.55 39	1.0 +08 3	39 +7.0 57	1.7 +04 1	+8 +03 1	+74 +1.21 40	+63 +51 43	+18 +51 17	+0 +00 +00	-- +1+0	+1+0	192 192	62 0	2.2			
06/04/75	5701 5701	295</28E-29P01	H 86 27	F C A+3	1b 323 24	1.0 +08 75	52 +2.26 72	1.6 +05 1	1.4 +1.70 4	104 +7.00 46	37 +7.74 24	23 +65 21	+0 +00 +00	+12 +10+0	+2+0	193 192	42 0	3.5			
09/09/75	5701 5701	245</28E-3nA01	H 68 2+	F C 7+6	23 210 56	1.0 +08 4	17 +7.4 37	1.1 +03 2	+2 +01 1	90 +1.44 71	14 +2.44 14	8.0 +23 11	+4.0 +06 3	-- +2+0	+1+0	136 135	64 0	0.9			
06/04/75	5701 5701	295</28E-3nF02	H 66 19	F C 7+5	38 320 56	4.0 +33 10	22 +06 29	2.8 +07 2	.3 +01 1	124 +2.03 63	32 +6.71 21	17 +15 15	3.0 +05 2	-- +1+0	+2+0	201 201	112 10	0.9			
07/07/75	5701 5701	295</28E-30G01	H 67 19	F C 7+3	36 341 56	0.0 +49 14	22 +9.6 28	2.6 +06 2	+2 +01 1	127 +2.46 61	36 +2.46 22	16 +5.51 15	5.0 +09 2	-- +2+0	+1+0	212 212	122 15	0.9			
07/07/75	5701 5701	295</28E-30H02	H 68 20	F C 7+9	24 751 56	3.0 +25 10	19 +83 32	1.9 +05 2	+4 +01 1	162 +1.67 65	24 +5.67 19	13 +3.7 14	2.0 +03 1	-- +2+0	+1+0	162 162	84 1	0.9			
11/11/74	5701 5701	295</28E-30K02	H 66 27	F C 7+6	324 324 1.50	5.0 +1.41 56	22 +9.6 13	2.5 +0.66 30	+2 +01 1	126 +2.47 66	25 +5.51 17	18 +5.1 16	1.0 +02 1	-- +2+0	+1+0	197 197	110 7	0.9			
05/05/75	5701 5701	295</28E-30L02	H 66 19	F C 7+5	33 278 60	2.0 +1.65 6	21 +1.65 33	1.8 +0.55 1	+2 +01 1	112 +1.84 68	23 +4.48 18	13 +3.7 14	1.0 +00 1	-- +2+0	+1+0	173 173	90 0	1.0			
06/04/75	5701 5701	295</28E-3nO02	H 66 21	F C 7+2	33 287 57	*.0 +33 11	20 +87 30	2.9 +07 2	+1 +00 1	126 +2.03 70	24 +5.37 17	13 +3.7 13	1.0 +02 1	-- +2+0	+1+0	184 184	100 0	0.9			
08/04/75	5701 5701	295</28E-3nO04	H 68 21	F C 7+4	34 290 56	5.0 +41 13	20 +87 29	2.4 +06 2	+2 +01 1	122 +2.00 67	25 +5.29 17	14 +3.7 13	5.0 +08 3	-- +2+0	+2+0	190 190	104 5	0.8			
06/04/75	5701 5701	295</28E-31B02	H 66 14	F C 7+5	31 283 55	4.0 +33 12	20 +87 31	2.9 +07 2	+3 +01 1	119 +1.95 71	20 +4.2 15	14 +3.9 14	2.0 +03 1	-- +2+0	+1+0	172 173	94 0	0.9			
06/04/75	5701 5701	295</28E-31R04	H 68 14	F C 7+8	31 275 56	3.0 +25 9	21 +9.1 33	2.4 +0.56 2	+5 +02 1	121 +1.98 69	21 +4.44 15	13 +3.7 13	3.0 +05 2	-- +2+0	+1+0	176 175	92 0	1.0			
05/05/75	5701 5701	245</28E-31R02	H 67 19	F C 7+4	42 360 50	5.0 +1.41 11	24 +1.64 10	3.6 +0.9 5	+2 +01 1	139 +2.28 60	28 +5.58 16	21 +5.49 16	9.0 +15 4	+11 +2+0	+0+0	229 229	124 11	0.9			
01/13/75	5701 5701	295</28E-31G02	H 67 19	F C 8+7	19 220 43	2.0 +16 7	25 +1.69 49	1.0 +0.33 1	+6 +0.64 1	87 +1.43 64	18 +3.37 17	13 +3.7 17	2.0 +03 1	-- +2+0	+1+0	143 143	56 0	1.5			
03/13/75	5701 5701	295</28E-31J02	H 67 19	F C 8+3	19 222 44	1.0 +08 6	25 +1.68 51	1.3 +0.53 1	+2 +04 2	90 +1.44 66	17 +3.35 19	12 +3.7 15	2.0 +03 1	+17 +2+0	+1+0	144 143	54 0	1.5			
01/13/75	5701 5701	295</28E-31J02	H 68 20	F C 7+9	23 255 1.45	3.0 +25 10	25 +1.69 43	2.2 +0.68 2	+5 +0.64 1	94 +1.44 60	16 +4.48 19	17 +4.06 18	4.0 +0.6 2	-- +2+0	+2+0	167 167	70 0	1.3			
01/13/75	5701 5701	295</28E-31K02	H 64 21	F C 7+0	34 304 55	5.0 +1.70 13	21 +1.61 29	2.8 +0.67 2	+1 +00 1	120 +1.47 66	28 +5.58 19	17 +4.05 16	3.0 +05 2	-- +2+0	+2+0	193 193	104 7	0.9			

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE LAB	TEMP PM	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN PERCENT REACTANCE VALUE										MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER									
				CA	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NH ₃	B	F	TDS	TH	NH ₃	SiO ₂	SUM	CaR	REM		
CENTRAL VALLEY SAN JOAQUIN VALLEY																							
03/24/75	295/28E-31003 5701	M 66 14	- F C	4.6 7.45 4.03	4.4 1.17 .06	7.0 1.17 .06	2.7 1.17 .06	2.5 1.17 .06	3 1.17 .06	141 57 19	38 79 20	24 82 4	9.0 15 4	-- 28.0 20	253 254 23	140 23 1.0							
06/04/75	295/28E-32001 5701 5701	M 71 21	F C	1.19 5.94 6.7	8.0 5.26 7	4.9 2.13 1	5.2 1.13 1	2.2 1.13 1	70 13 13	268 61 25	80 5.58 1	5.0 2.26 1	-- 14.0 1	583 583 372	332 1.2								
08/04/75	295/28E-32101 5701 5701	M 71 22	F C	1.19 7.47 6.7	1.26 6.29 1.07	4.2 1.83 1.13	5.0 1.13 1	3.0 1.13 1	80 14 14	268 5.58 5.58	85 2.10 2.5	17.0 1.27 3	-- 15.0 15	610 611 302	368 1.0								
07/07/75	295/28E-32N01 5701 5701	M 71 21	F C	1.19 4.55 5.9	5.2 2.54 5.9	5.0 1.31 1.30	3.0 1.31 1.30	3.1 1.30 1.30	1.1 1.1 1	91 1.49 1.49	73 1.52 1.52	4.6 1.30 1.30	7.0 11 11	-- 18.0 1	288 279 75	150 1.1							
08/04/75	295/28E-32P02 5701 5701	M 71 22	F C	1.19 7.47 7.26 6.00	4.8 4.39 4.39 0.0	1.2 1.2 1.2 1.2	4.2 1.83 1.83 1.25	3.7 1.13 1.13 1	121 1.98 1.98 1.27	155 3.23 3.23 44	6.6 1.46 1.46 1.25	19.0 31 31	-- 21.0 21	467 467 467	467 170 1.1								
05/14/75	295/28E-34J01 5701 5701	M 77 25	F C	1.19 2.26 1.02	317 2.54 2.54	6.0 9.19 9.19	2.9 1.24 1.24	9.2 1.24 1.24	1.1 1.00 1.00	28 1.43 1.43	81.5 16.97 16.97	275 7.76 7.76	71.0 1.15 1.15	-- 16.0 1	1732 1731 795	A18 3.2 5	E						
05/05/75	295/28E-35E03 5701 5701	M 78 26	F C	1.19 7.47 4.87	51 2.54 3.9	5.0 1.37 1.37	8.9 1.37 1.37	5.5 1.37 1.37	1.6 1.01 1.01	119 1.95 1.95	115 2.39 2.39	70 1.95 1.95	8.0 1.15 1.15	-- 19.0 1	416 416 29	128 3.4							
05/14/75	31S/24E-0A401 5701 5701	M 79 26	F C	1.19 6.75 3.80	50 2.50 2.50	3.0 1.25 1.25	8.3 3.61 3.61	5.5 1.64 1.64	1.6 1.02 1.02	116 1.90 1.90	115 2.39 2.39	5.9 1.95 1.95	9.0 1.15 1.15	-- 14.0 1	406 406 406	136 42 3.1							
06/09/75	31S/24E-0A401 5121 5191	M 79	- F	1.19 2.55 3.2	50 4.49 13	6.0 4.49 55	2.9 4.49 1	9.5 4.49 1	1.6 1.00 1	117 3.39 3.39	135 2.81 2.81	51 1.48 1.48	8.0 1.01 1.01	-- 4.0 4.0	455 453 5	174 5 3.3							
06/09/75	31S/24E-11J01 5121 5191	M 79	- F	1.19 1.50 3.1	30 1.03 1.03	7.6 3.31 3.31	1.3 1.03 1.03	0 0.00 0.00	0 1.23 1.23	67 7.50 7.50	120 1.19 1.19	42 1.25 1.25	5.5 1.01 1.01	-- 0.9 0.9	305 304 77	305 22 3.8							
06/09/75	31S/25E-03M01 5121 5191	M 79	- F	1.19 3.09 5.0	62 2.8 2.8	3.6 1.23 1.23	4.9 2.1 2.1	2.1 0.00 0.00	0 1.43 1.43	47 1.37 1.37	18 4.06 4.06	144 1.22 1.22	13.7 22 22	-- -- --	336 335 97	169 169 5							
06/09/75	31S/25E-04R01 5121 5191	M 81	- F	1.19 4.50 5.5	44 2.45 3	1.7 1.4 1.4	4.6 2.00 2.00	1.9 0.00 0.00	0 1.21 1.21	111 1.94 1.94	45 1.60 1.60	21 0.46 0.46	28.8 1.46 1.46	+19 +19 +19	-- -- --	264 263 1.8	129 129 5						
06/09/75	31S/25E-09L01 5121 5191	M 81	- F	1.19 2.75 3.2	15 0.02 1	3.3 1.52 1.52	7.5 1.02 1.02	6.0 0.00 0.00	0 1.04 1.04	94 1.21 1.21	10 0.27 0.27	9.6 0.27 0.27	2.7 0.04 0.04	+0.4 +0.4 +0.4	-- -- --	120 120 3.4	120 0 5						
06/09/75	31S/25E-09L01 5121 5191	M 81	- F	1.19 2.75 3.2	15 0.02 1	3.3 1.52 1.52	7.5 1.02 1.02	6.0 0.00 0.00	0 1.04 1.04	94 1.21 1.21	10 0.27 0.27	9.6 0.27 0.27	2.7 0.04 0.04	+0.4 +0.4 +0.4	-- -- --	120 120 3.4	120 0 5						
06/09/75	31S/25E-24M01 5121 5191	M 81	- F	1.19 2.75 3.2	15 0.02 1	3.3 1.52 1.52	7.5 1.02 1.02	6.0 0.00 0.00	0 1.04 1.04	94 1.21 1.21	10 0.27 0.27	9.6 0.27 0.27	2.7 0.04 0.04	+0.4 +0.4 +0.4	-- -- --	120 120 3.4	120 0 5						
06/09/75	31S/25E-24M01 5121 5191	M 81	- F	1.19 2.75 3.2	15 0.02 1	3.3 1.52 1.52	7.5 1.02 1.02	6.0 0.00 0.00	0 1.04 1.04	94 1.21 1.21	10 0.27 0.27	9.6 0.27 0.27	2.7 0.04 0.04	+0.4 +0.4 +0.4	-- -- --	120 120 3.4	120 0 5						
06/26/75	31S/25E-24M01 5121 5806	M 79	- F	1.19 1.65 1.08	34 1.12 3	1.4 1.12 1.12	3.7 1.05 1.05	2.0 0.05 0.05	0 0.00 0.00	116 1.90 1.90	42 0.87 0.87	21 0.61 0.61	1.9 0.03 0.03	+15 +0.3 +0.3	-- -- --	197 197 88	197 0 1.7						
05/05/75	31S/27E-01B02 5701 5701	M 66 10	F C	1.19 1.79	21 2.02	1.0 1.05	2.0 0.87	1.5 0.87	5 0.02	92 1.21	12 1.25	8.0 2.25	+	-- 24.0 1	134 133 58	58 0 1.2							
06/04/75	31S/27E-01G02 5701 5701	M 66 2	F C	1.19 7.01	33 6.00	10 1.65	3.9 1.70	4.3 1.11	2 0.01	198 3.25	25 1.31	37 1.31	26.0 +	-- 26.0 1	370 371 212	212 0 1.7							
07/07/75	31S/27E-01J01 5701 5701	M 69 19	F C	1.19 7.01	33 2.93	4.0 1.65	2.1 1.65	6.0 0.66	0 0.06	21 1.22	25 1.22	3.0 2.02	+	-- 18.0 1	183 182 100	100 0 0.9							
05/05/75	31S/27E-01K01 5701 5701	M 67 14	F C	1.19 7.04	42 3.95	0.0 2.10	0.0 1.39	0.0 0.99	0 0.01	153 2.51	36 1.62	20 1.75	1.40 0.23	-- 26.0 2	255 255 130	130 4 1.2							

Kee,

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HC ₀₃ SO ₄ CL NO ₃	MILLIGRAMS PER LITER			MILLIEQUIVALENTS PER LITER			MILLIGRAMS PER LITER			
					B	F	TDS	B	F	TDS	SiO ₂	Sum	NH ₃	SAR
CENTRAL VALLEY SAN JOAQUIN VALLEY														
09/09/75	315<27E-01N01	M		8.0 6.6 5.7	21 19 24	2.2 0.6 0.7	.1 .00 .00	159 2.61 6.7	25 .58 .45	16 .23 .23	14.0 2.3 6	-- 25.0 12	236 235 10	142 0 0.8
01/13/75	315<27E-02A02	M		2.0 3.7 5.2	4.0 3.3 1.2	2.6 1.7 3	.3 .07 .03	1.9 1.79 6.8	1.7 .35 .15	14 .39 .15	5.0 0.8 3	-- 24.0 15	169 168 0	88 0 0.9
08/04/75	305<27E-02F01	M		3.4 3.7 5.3	6.0 4.9 3.0	2.6 1.6 1.5	.1 .06 .00	122 2.60 6.5	19 .40 .13	21 .59 .19	5.0 0.8 3	-- 24.0 19	193 193 10	108 0 0.9
09/09/75	305<27E-02H01	M		4.3 2.15 5.8	6.0 4.9 1.3	2.3 1.00 27	.1 .06 .00	151 2.47 6.4	27 .56 .15	17 .32 .13	20.0 3.2 8	-- 26.0 13	240 239 9	136 9 0.9
10/09/74	305<27E-02P01	M		3.5 1.75 5.3	6.0 4.9 3.0	2.3 1.00 1.5	.1 .05 .00	115 1.86 5.8	23 .44 .15	23 .45 .20	14.0 2.3 7	-- 28.0 15	210 211 110	110 18 0.9
10/09/74	305<27E-11B01	M		7.0 1.95 5.2	7.0 5.8 1.5	2.7 1.17 31	.2 .06 .00	144 2.36 6.3	25 .52 .14	24 .58 .18	10.0 1.6 4	-- 30.0 18	235 235 126	8 1.0 0
02/12/75	305<27E-11D02	M		2.4 1.20 5.3	3.0 2.5 1.1	1.8 1.74 2	.5 .04 .02	1.62 1.62 7.6	49 .29 13	14 .29 .15	2.0 0.3 1	-- 23.0 15	147 147 72	147 0 0.9
10/09/74	305<27E-11R01	M		4.5 2.25 5.1	10 1.11 1.0	2.8 1.11 29	.1 .06 .00	164 2.75 6.2	39 .81 18	21 .59 13	20.0 .32 7	-- 31.0 18	282 282 156	156 16 1.1
10/07/74	305<27E-12L02	M		--	--	--	--	--	--	--	--	.14	--	--
05/05/75				5.4 2.89 3.8	9.0 7.74 1.5	3.0 1.31 27	.1 .10 .02	183 3.76 6.3	43 .96 19	22 .62 13	16.0 .26 5	-- 32.0 13	300 300 172	300 21 1.0
10/09/74	315<27E-12N02	M		4.05 2.25 5.7	6.0 1.66 1.7	2.3 1.00 25	.1 .05 1	163 2.67 6.6	34 .71 18	18 .51 13	8.0 .13 3	-- 29.0 13	247 247 145	247 12 0.8
09/09/75	315<27E-12P01	M		2.7 1.35 5.1	5.4 1.43 1.6	2.1 1.01 32	.2 .01 2	1.17 1.75 6.6	10 .42 16	8.0 .28 11	8.0 1.3 5	-- 26.0 11	169 169 68	169 0 0.9
10/09/74	315<27E-13C01	M		4.1 2.05 5.2	6.0 1.61 1.7	2.7 1.05 30	.1 .05 .01	164 2.69 6.7	31 .65 15	18 .55 11	14.0 .23 6	-- 30.0 11	249 250 135	249 1 1.0
02/12/75	315<27E-13M01	M		3.3 1.65 5.5	6.0 1.43 1.6	1.9 1.75 27	.1 .02 2	124 2.03 6.9	22 .46 16	13 .37 13	9.0 .08 3	-- 22.0 16	182 183 106	182 5 0.8
02/18/75	305<27E-13H02	M		2.8 1.40 5.2	5.0 1.41 1.5	1.9 1.05 31	.1 .05 2	128 2.02 6.9	35 .40 14	12 .33 12	6.0 .10 4	-- 24.0 12	174 174 92	174 0 0.9
10/09/74	305<27E-14H02	M		2.8 1.40 5.3	5.0 1.41 1.6	1.8 1.05 30	.1 .05 .01	114 1.87 7.2	18 .37 14	12 .34 13	1.0 .02 1	-- 25.0 13	166 165 90	166 0 0.8
02/12/75	5121 305<27E-14P01	M		2.6 1.30 5.4	5.0 1.33 1.4	1.7 1.04 31	.1 .04 2	106 1.74 7.2	16 .33 14	11 .31 13	2.0 .03 1	-- 26.0 13	156 156 82	156 0 0.8
06/26/75	5121 305<27E-14C01	M		5.3 2.64 5.7	9.0 7.3 1.6	2.7 1.17 25	.0 .07 2	178 2.92 6.3	35 .77 17	21 .62 13	14.0 .35 8	-- 25.0 12	260 245 170	260 23 0.9
06/20/75	5121 305<27E-20F01	M		25 1.25 4.1	8.0 1.00 21	2.5 1.00 35	0 .06 3	128 2.10 6.1	35 .73 21	21 .44 12	13.7 .22 6	+26 -- 6	188 187 95	188 0 1.1
07/07/75	5121 305<27E-23C02	M		38 1.80 5.5	8.0 1.49 1.5	2.1 1.05 28	.1 .02 2	126 2.17 6.6	35 .60 19	15 .42 13	13.7 .05 2	-- 18.0 13	192 193 114	192 10 0.9
05/05/75	5121 305<27E-23C03	M		3.0 1.90 5.7	5.0 1.01 1.25	2.2 0.95 29	.1 .05 2	136 2.23 6.6	29 .60 18	14 .39 12	4.0 .06 2	-- 24.0 12	206 205 116	206 4 0.9

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP PN	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN CA MG NA K CO ₂ HC ₁₃ SO ₄	MILLIGRAMS PER LITER						MILLIGRAMS PER LITER						
					PERCENT REACHANCE CL NO3	MILLIEQUIVALENT PER LITER HC ₁₃ SO ₄	8	F	TDS	TH	SUM	NCH	SAR	REM			
CENTRAL VALLEY SAN JOAQUIN VALLEY																	
07/07/75	305/27E-23Cn4 5701	H 67 19	F 7.7 C	39 1.95 57	0.0 +.49 14	21 .91 27	2.1 .05 1	.5 +.02 1	134 2.02 1	31 +.05 15	17 +.48 14	8.0 +.13 4	-- --	21.0 212	213 212	124 10	0.8
03/24/75	305/27E-23Dn1 5701	H 64 18	F 7.7 C	27 1.35 55	3.0 +.25 10	19 +.03 14	1.4 +.04 1	.3 1.01 1	102 1.67 88	18 +.37 15	12 +.14 14	4.0 +.06 2	-- --	19.0 154	155 0	82 0.9	
02/12/75	305/28E-05A01 5701	H 70 21	F 8.7 C	54 2.59 59	10 +.22 16	33 1.44 29	2.6 +.07 1	.9 1.02 1	133 2.14 1	45 1.44 18	58 +.64 32	2.40 +.37 7	-- --	30.0 322	322 178	65 1.1	
09/10/75	305/28E-05C01 5701	H 67 19	F 7.4 C	63 3.14 57	11 +.09 16	32 1.39 25	2.7 1.01 1	.3 1.02 1	175 2.87 53	49 1.02 19	44 1.24 1.24	20.0 +.32 6	-- --	27.0 335	335 202	58 1.0	
01/13/75	305/28E-05E01 5701	H 66 19	F 7.4 C	46 2.30 56	8.0 +.86 16	25 1.19 26	2.7 1.07 2	.2 1.01 1	132 2.16 53	35 1.73 18	36 1.42 25	8.0 +.13 3	-- --	24.0 250	251 148	40 0.9	
02/03/75	305/28E-05F01 5701	H 68 20	F 7.9 C	38 1.90 52	0.0 +.49 14	27 1.17 32	2.5 +.06 2	.7 1.02 1	123 2.02 55	34 1.02 19	26 1.73 20	12.0 +.19 5	.11 --	24.0 231	230 120	18 1.1	
03/24/75	305/28E-05K01 5701	H 68 20	F 8.0 C	39 1.95 53	5.0 +.41 11	29 1.28 34	2.0 +.05 1	.9 1.02 1	125 2.05 56	41 1.59 23	71 +.59 16	8.0 +.13 4	-- --	22.0 229	230 120	14 1.2	
02/12/75	305/28E-05Nn1 5701	H 70 21	F 8.2 C	23 1.15 45	2.0 +.16 6	27 1.17 6	1.0 1.02 2	.1 1.02 2	105 1.72 65	26 1.72 16	15 1.42 16	3.0 +.05 2	-- --	17.0 152	161 68	0 1.5	
09/10/75	305/28E-06Cn2 5701	H 66 19	F 7.0 C	47 2.35 59	8.0 +.49 12	24 1.46 26	2.7 1.06 2	.1 1.02 1	151 2.02 61	36 1.75 19	21 1.59 15	4.0 +.23 6	-- --	26.0 251	252 144	19 0.9	
05/05/75	305/28E-06C03 5701	H 66 19	F 7.4 C	41 2.05 57	5.0 +.41 11	25 1.09 30	2.4 1.06 2	.2 1.01 1	124 2.02 58	26 1.54 15	32 1.90 25	3.0 +.05 1	-- --	24.0 220	220 122	21 1.0	
08/04/75	305/28E-06Gn2 5701	H 67 19	F 7.2 C	48 2.30 56	8.0 +.66 16	25 1.04 26	3.0 1.06 2	.2 1.01 1	151 2.47 50	40 1.83 20	27 1.76 18	4.0 +.06 1	-- --	23.0 250	251 148	24 0.9	
03/24/75	305/28E-06Hn2 5701	H 66 19	F 7.6 C	30 1.50 51	5.0 +.41 14	22 1.06 13	2.2 1.02 2	.3 1.01 1	112 1.62 62	25 1.52 18	17 1.48 16	6.0 +.10 3	.14 --	24.0 200	220 122	3 1.0	
09/09/75	305/28E-07C01 5701	H 68 20	F 7.2 C	42 2.10 55	8.0 1.00 17	23 1.06 26	2.1 1.02 2	.1 1.02 1	151 2.02 51	34 1.71 19	22 1.62 16	13.0 +.21 5	-- --	27.0 240	240 138	24 0.9	
07/07/75	305/28E-07E01 5701	H 66 20	F 7.4 C	37 1.85 56	8.0 +.49 15	21 1.01 27	2.3 1.02 1	.2 1.01 1	112 2.02 63	29 1.60 18	18 1.51 15	12.0 +.11 3	-- --	22.0 205	204 118	13 0.8	
10/07/74	305/28E-08Bn1 5701	H -- --	F -- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	.04 --	-- --	-- --	--	
07/07/75	5701	H 69 21	F 7.9 C	59 2.94 54	7.0 1.83 11	42 1.01 34	3.3 1.02 1	.7 1.02 1	128 2.10 39	96 2.00 37	40 1.13 21	12.0 +.19 3	-- --	1.0 341	341 176	70 1.4	
01/13/75	305/28E-08H02 5701	H 72 22	F 7.9 C	29 1.30 42	4.0 +.33 11	32 1.09 45	2.8 1.07 2	.5 1.02 1	124 1.62 53	25 1.52 17	25 1.71 23	12.0 +.19 6	-- --	3.0 194	193 82	0 1.5	
10/09/74	305/2dE-17A01 5701	H 70 21	F 7.9 C	35 1.75 36	4.2 1.99 21	42 1.83 19	3.5 1.09 2	.7 1.02 1	131 2.15 46	40 1.81 18	42 1.62 16	26.0 +.42 9	-- --	3.0 30.0	296 297	135 29	
05/05/75	5701	H 76 21	F 7.8 C	43 2.15 42	4.0 1.74 15	47 2.04 15	5.0 1.02 3	.6 1.02 1	138 2.26 45	46 1.86 19	40 1.60 19	32.0 +.52 7	-- --	3.0 32.0	328 31	144 1.7	
09/09/75	305/2dE-18H01 5701	H 66 19	F 7.3 C	46 2.30 57	7.0 1.58 14	25 1.09 27	1.8 1.05 1	.2 1.01 1	126 2.02 59	39 1.60 20	20 1.51 14	17.0 +.27 7	-- --	25.0 253	253 144	24 0.9	
02/12/75	305/2dE-18E01 5701	H 67 19	F 7.8 C	34 1.70 55	6.0 1.49 16	20 1.07 28	1.5 1.04 1	.5 1.02 1	128 2.10 68	24 1.60 16	14 1.39 13	8.0 +.10 3	-- --	26.0 195	195 108	4 0.8	

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLE LAD	TEMP FIELD PH FC	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃ SO ₄										MILLIGRAMS PER LITER				MILLIGRAMS PER LITER				
			PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM		
CENTRAL VALLEY SAN JUANIN VALLEY																					
06/26/75	5121 5106	315/26E-25Hn1 H	58 2.89 4.7	12 1.00 1.6	48 2.09 3.4	6.5 0.17 3	0 0.00 0	222 3.64 5.9	73 1.52 25	31 .09 14	6.5 .10 2	.17 +.10 2	22.0 2.23 2	347 367 13	196 13 1.5						
06/26/75	5121 5106	315/26E-28Jn1 H	67 3.3 56	11 1.49 1.6	35 1.52 2.6	4.3 1.11 1.1	0 0.00 0	211 3.46 58	73 1.52 25	27 1.40 13	14.0 .71 4	.17 +.23 4	29.0 2.9 4	338 365 43	217 11 1.0						
06/26/75	5121 5106	315/26E-32Hn1 H	31 1.45 3.9	4.0 1.45 1.7	46 2.10 4.5	5.3 1.18 1.7	0 0.00 0	167 2.74 62	48 1.00 23	19 1.54 12	9.3 +.15 3	.15 28.0 3	252 276 12	115 0 1.9							
06/09/75	5121 5191	315/26E-32Hn1 H	30 1.50 3.3	4.6 1.79 1.7	50 2.18 4.7	5.2 1.13 3	0 0.00 0	175 2.97 51	100 2.08 39	13 .34 7	2.2 .34 1	.33 28.0 1	296 297 2	114 0 2.0	S						
06/09/75	5121 5191	315/26E-22Jn1 H	560 6.1 34	129 27.94 12	1010 43.94 5.3	23 6.60 1	0 0.00 0	5 +.30 57	2100 3.72 57	1140 32.15 41	9.8 +.96 1	3.80 3.80 1	-- -- --	5030 5017 1892	1892 1892 10.1		S				
06/09/75	5121 5191	315/25E-11Gn1 H	13 8.0 .9	2 .02 0.2	111 4.83 4.0	5.5 1.01 0.01	0 0.00 0	101 1.66 1.29	110 2.29 40	64 1.81 31	5 +.01 1	.65 +.01 1	-- -- --	347 347 26	26 0 9.5	E	S				
06/09/75	5121 5191	315/25E-11Rn1 H	3.0 8.8 .15	1 3.13 1.5	72 1.03 1	6.8 2.27 61	0 0.00 0	6 +.20 25	45 1.94 13	17 1.50 13	5 +.01 1	.55 +.01 1	-- -- --	208 208 0	8 0 11.1		S				
06/20/75	5121 5191	315/26E-26Hn1 H	7.5 7.9 11	1 2.74 2	63 2.84 1	3.5 1.09 1	0 0.00 0	101 1.66 1.40	64 1.33 10	12 3.55 10	9 +.01 7	.53 +.01 7	-- -- --	203 203 23	23 0 5.7						
06/20/75	5121 5191	315/26E-27Hn2 H	15 7.0 20	5 1.40 3	67 2.01 77	2.5 1.04 2	0 0.00 0	67 1.61 1.26	132 1.75 66	10 3.30 7	5 +.01 7	.45 +.01 5	-- -- --	262 262 40	40 0 4.8	S					
06/26/75	5121 5106	315/26E-30Gn2 H	8.0 8.2 11	1 3.22 1	74 3.22 1	1.5 1.04 1	0 0.00 0	110 1.86 1.46	81 1.59 5	6 1.17 5	0 +.01 5	.34 +.01 5	-- -- --	226 226 20	20 0 7.1						
06/20/75	5121 5191	315/26E-31Gn1 H	4.5 7.9 12	1 3.26 2	75 3.26 1	3.2 1.00 2	0 0.00 0	114 1.87 47	90 1.87 5	7.1 1.51 5	5 +.01 5	.51 +.01 5	-- -- --	244 243 28	28 0 6.2						
06/26/75	5121 5106	315/26E-36Aq1 H	10 7.4 15	1 2.78 3	44 2.78 1	1.2 0.03 1	0 0.00 0	96 1.54 46	74 1.52 8	6 1.54 8	5 +.01 8	.5 +.01 8	-- -- --	209 234 30	20 0 5.1						
06/26/75	5121 5106	315/27E-02Gn1 H	3.8 7.9 56	6 1.90 16	21 1.91 27	2.4 1.06 2	0 0.00 0	153 2.51 73	24 1.50 15	11 1.50 15	6.5 1.10 3	.13 +.10 3	-- -- --	186 211 123	123 0 0.0						
06/26/75	5121 5106	315/27E-04Ln1 H	23 7.7 50	2.5 1.15 1.5	21 1.91 1.5	2.0 1.05 1	0 0.00 0	110 1.80 77	17 1.35 7	6.0 1.17 7	5 +.01 7	.13 +.01 7	-- -- --	126 150 66	66 0 1.1						
06/26/75	5121 5106	315/27E-10Cn2 H	62 7.6 58	9.3 3.09 14	32 1.76 26	3.2 1.39 2	0 0.08 0	181 2.97 56	82 1.71 32	20 1.71 11	6.5 1.57 2	.15 +.10 2	-- -- --	305 332 194	194 44 1.0						
06/20/75	5121 5191	315/27E-12Jn2 H	55 7.7 50	6.5 2.74 10	40 1.74 34	4.0 1.10 2	0 0.00 0	168 2.75 58	52 1.08 23	16 1.26 10	2.6 +.45 9	.25 +.43 9	-- -- --	284 283 164	164 26 1.4	S					
06/26/75	5121 5106	315/27E-14Fn1 H	45 8.0 50	5.6 2.25 10	40 1.74 38	2.6 1.10 2	0 0.00 0	176 2.88 64	51 1.06 23	20 1.08 13	9 +.57 13	.19 +.01 1	-- -- --	253 280 136	136 0 1.5						
06/20/75	5121 5106	315/27E-14Jn2 H	10 7.4 32	1.8 1.5 10	20 1.87 10	1.7 1.04 5	0 0.00 0	60 1.98 54	35 1.73 40	3.5 1.10 5	5 1.17 5	.30 +.01 1	-- -- --	103 102 32	32 0 1.5	E C S					
06/26/75	5121 5106	315/27E-15Ln1 H	70 7.3 56	5.0 3.49 11	45 1.96 31	4.5 1.12 2	0 0.00 0	228 3.17 53	110 1.73 32	32 9.3 13	9.3 1.15 2	.39 +.15 2	-- -- --	393 391 206	206 21 1.4						
06/20/75	5121 5191	315/27E-17Jn1 H	75 7.7 52	5.0 3.74 10	45 1.96 10	4.0 1.04 5	0 0.00 0	235 2.85 53	120 2.50 34	28 5.3 11	5.3 1.09 1	.26 +.01 1	-- -- --	402 400 15	206 15 1.4	S					

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HCO ₃ SO ₄								MILLIGRAMS PER LITER PERCENT REACTANCE VALUE			MILLIGRAMS PER LITER			REM				
				B	D	7.3	12	0	289	110	25	1.4	+20	--	454	249	B	F	TDS	TM	NCH	SAR
CENTRAL VALLEY SAN JOAQUIN VALLEY																						
06/20/75	5121 5191	3145-27E-29F01	M	30 54	4.9	8.0 6	7.3 38	12 1	0 61	289 30	110 71	25 1.01	+20	--	454	249	12	2.0	5			
06/20/75	5121 5191	3145-27E-30A01	M	30 43	4.0	3.6 31	53 231	2.0 75	0 1	154 2.52	62 1.29	19 56	+5	+29	--	258	116	0	2.1	C	5	
06/20/75	5121 5191	3145-27E-31C01	M	30 20	1.3 0.7	8.8 2.44	56 1.2	1.2 0.03	0 1.00	116 1.97	46 0.96	11 3.2	+5	+21	--	187	36	0	4.1			
06/26/75	5121 5d06	3145-27E-13H02	M	30 45	5.6 1.1	9.7 3.00	6.9 1.14	5.5 0.00	0 2.00	203 3.33	99 2.06	42 1.20	+5	+23	--	426	200	33	2.1			
06/26/75	5121 5d06	3145-20E-16F01	M	30 46	8.1 8	9.0 3.42	90 2.44	5.3 1.03	0 0.00	142 2.33	149 3.01	120 3.40	+5	+15	--	526	240	547	123	2.5		
06/26/75	5121 5d06	3145-28E-31D01	M	30 36	2.5 6	2.4 2.00	4.6 1.47	1.7 0.14	0 0.00	131 1.94	42 0.57	21 25	+5	+15	--	200	73	0	2.4			
06/26/75	5121 5d06	3145-28E-33J03	M	30 15	8.0 6	1.9 1.15	4.6 7.0	2.8 3	0 0.00	111 1.82	33 0.69	3.9 2.6	+5	+13	--	151	28	0	3.8			
06/26/75	5121 5d06	3145-28E-36A01	M	30 16	8.0 7	2.1 1.7	4.4 1.00	3.2 0.9	0 0.00	99 1.62	29 1.64	11 24	+5	+11	--	148	29	0	3.6			
05/23/75	5121 5d06	3145-29E-02D01	M	30 44	7.7 2.6	2.6 2.74	6.0 1.97	4.1 2.18	0 0.00	267 4.10	98 3.39	46 2.04	+5	+22	--	505	293	72	1.5			
05/23/75	5121 5d06	3145-29E-03A02	M	30 39	5.5 2.74	2.4 1.97	5.0 2.18	0 0.00	0 4.10	81 1.69	19 1.56	+5	+18	--	411	238	31	1.4				
05/23/75	5121 5d06	3145-29E-04P01	M	30 43	5.5 1.5	2.4 2.44	5.6 1.18	7.0 1.00	0 0.00	201 3.29	72 1.50	48 1.37	+5	+22	--	352	180	373	15	1.8		
06/26/75	5121 5d06	3145-29E-07A01	M	30 44	5.5 1.12	1.3 2.22	5.1 0.10	6.4 0.00	0 0.00	204 3.34	81 1.69	31 0.88	+5	+15	--	386	197	220	29	1.6		
05/23/75	5121 5d06	3145-29E-11O01	M	30 47	8.2 1.40	1.7 3.00	7.0 1.80	0 0.00	0 4.00	256 4.00	97 1.20	59 1.02	+5	+18	--	512	276	532	65	1.8		
06/26/75	5121 5d06	3145-29E-14C01	M	30 43	7.2 1.34	1.6 2.15	5.4 0.13	6.5 0.00	0 0.00	225 3.29	70 1.50	28 1.37	+5	+22	--	458	248	458	62	1.5		
06/26/75	5121 5d06	3145-29E-14R01	M	30 39	5.8 1.34	4.4 2.15	6.2 0.13	5.0 0.00	0 0.00	287 3.29	82 1.71	60 1.71	+5	+59	--	436	186	459	14	2.6		
06/26/75	5121 5d06	3245-28E-14G01	M	30 46	15.4 5.7	6.6 4.38	1.70 1.01	6.4 0.00	0 0.00	72 1.18	578 12.03	12 1.34	+7	+38	--	916	413	939	352	2.6		
06/26/75	5121 5d06	3245-29E-11R01	M	30 41	10.6 1.52	1.7 1.54	15.0 0.99	3.7 0.00	0 0.00	70 1.15	519 10.81	3.5 1.10	+5	+57	--	819	272	835	214	4.0	E	
05/23/75	5121 5d06	3245-29E-25P01	M	30 46	15.0 7.4	1.3 1.41	17.2 7.49	8.2 2.21	0 0.00	45 1.16	693 14.43	12 2.02	+5	+33	--	1097	433	1114	354	3.6		
06/26/75	5121 5d06	3245-27E-03P01	M	30 34	3.0 1.50	6.6 5.54	6.6 2.26	5.6 0.00	0 0.00	147 2.41	74 1.54	14 1.34	+5	+30	--	255	103	280	0	2.2		
06/20/75	5121 5191	3245-27E-14A01	M	30 28	2.5 1.24	6.0 1.54	6.3 2.26	5.6 0.00	0 0.00	145 2.41	57 1.54	17 1.34	+5	+45	--	277	95	276	0	2.8		
06/20/75	5121 5191	3245-27E-14A01	M	30 28	2.5 1.24	6.0 1.54	6.3 2.26	5.6 0.00	0 0.00	145 2.41	57 1.54	17 1.34	+5	+45	--	277	95	276	0	2.8		

TABLE E-1 (Continued)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP FIELD PM EC	MINERAL CONSTITUENTS IN CA MG NA K CO ₃ HC ₀₃ SO ₄	MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REFRACTANCE VALUE	MILLIGRAMS PER LITER												
					A CL	F NO ₃	TDS SiO ₂	TH SUM	NH ₃	SAR	REM						
CENTRAL VALLEY SAN JOAQUIN VALLEY																	
06/20/75	5121 5191	32°/27°E+15°N1 H	35 1.75 33	5.0 +4.9 9	6.7 2.91 4.5	5.5 +1.4 3	0 +0.0	195 3+20 52	110 2+29 37	21 +6.0 10	5.8 +0.9 1	.38 --	348 347	112 0	2+0	S	
06/26/75	5121 5006	32°/27°E+23°N1 H	57 2.79 36	10 +8.2 10	93 4.75 52	5.1 +1.3 2	0 +0.0	148 2+43 31	227 +6.73 60	24 +4.0 +0.1	+3.8 17.0	--	491 507	184 62	3+0		
06/20/75	5121 5191	32°/27°E+23°N1 H	56 2.79 35	12 +9.4 12	95 4.13 51	6.6 +1.7 2	0 +0.0	175 2+47 37	200 +6.16 53	28 +8.1 10	+6.6 +0.1	.37 --	486 485	189 46	3+0	S	
06/20/75	5121 5191	32°/27°E+24°N1 H	71 3.54 33	24 1.97 18	113 4.92 4.6	9.5 +2.4 2	0 +0.0	181 2+47 29	300 +6.25 62	30 +4.5 9	1.3 +0.2	.53 --	640 639	276 127	3+0	S	
05/23/75	5121 5006	32°/27°E+32°L01 H	160 4.20 43	30 2.47 13	190 8.27 4.3	10 +2.6 1	0 +0.0	35 +5.7 3	914 16.95 88	60 +7.0 9	5.0 +0.8	.31 +.5	1293 1293	540 509	3+6		
06/26/75	5121 5006	32°/26°E+01°P01 H	5.0 1.25 10	1.3 +1.1 4	4.7 2.04 4.3	2.9 +0.7 3	0 +0.0	95 1.56 +0.3	34 +.79 32	3.9 +1.1 4	+8.8 +0.1	.15 --	147 8+0	18 0	4+8		
01/06/75	5003 5003	09N/20W+01P01 S	23 1.16 19	33 2.77 4.6	2.46 1.93 1	3.7 +0.9 1	0 +0.0	231 3+79 64	78 1.64 28	15 +4.4 7	+4.9 +0.8	--	318+ 320	196 7	1+4	E	
09/25/75	5050 1010	09N/20W+05P01 S	48n 2.05 40	41 1.99 1.99	12 1.96 1.99	4.5 +0.8 2	3.0 +0.7	211 3+66 70	50 1.04 21	11 +1.04 6	3.9 +0.6	.20 +0.1	--	267 272	152 0	1+6	
09/25/75	5050 0900	09N/20W+30P01 S	514 2.84 46	57 1.32 21	16 1.82 1.92	4.5 +0.6 1	1.7 +0.0	198 3+25 54	109 2.27 37	11 +3.1 5	4.0 +2.3	.10 +0.4	--	336 351	209 46	1+4	
09/25/75	5050 5050	09N/21W+25A01 S	450 2.82 52	48 1.52 11	39 1.70 37	0.3 +0.3 1	0 +0.0	158 2.59 57	77 1.69 35	7.6 +2.1 5	8.2 +1.3 3	.00 --	--	256 265	146 17	1+4	
08/05/75	5064 5006	11N/18W+18P00 S	57 2.64 48	16 1.32 21	48 2.09 33	4.8 +0.7 0	0 +0.0	314 5.15 81	35 .73 11	11 +3.1 5	12.4 +2.0 3	.32 --	--	339 334	209 0	1+4	
05/23/75	5121 5006	11N/20W+13M01 S	7.8 1.39 11	1.6 +1.3 4	66 2.87 4.2	4.3 +1.1 3	0 +0.0	143 2.34 67	43 .98 26	9.2 +2.6 7	+1 +0.0	.26 --	204 215	26 0	5+6		
05/23/75	5121 5006	11N/20W+14M01 S	1.1 0.09 8.1	*1 +.01 13.49	310 1.19 1.9	7.6 +0.0 0	0 +0.0	143 2.34 17	43 .98 75	34 +.91 7	+4.9 +15 1	--	926 945	3 0	75+9		

TABLE E-2

MINOR ELEMENT ANALYSES OF GROUND WATER

Abbreviations and Codes used in this table are:

Abbreviations

D	Dissolved Concentration
T	Total Concentration
REM	Remarks

Sampler (SAMP) and Laboratory (LAB) Codes

5701	California Water Service Company
5803	Hornkohl Laboratory

TABLE E-2
MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE	SAMPLE	LAB	DEPTH	TEMP	TIME	ANALYST	CONSTITUENTS IN MILLIGRAMS PER LITER						MERCURY	SELENIUM	STIBER	ZINC	IRON
							CHLORIDE (T)	CHLORIDE (A/F)	CALCIUM	MANGANESE	LEAD						
CENTRAL VALLEY SAN JOAQUIN VALLEY																	
1957/22E-31A(1) H							--	--	--	--	1.00 T	--	--	--	--	0.04 T	
09/11/75 5711	6A F	5711	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1957/22E-32PL(1) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
05/27/75 5711	70 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
1957/22E-05C(1) H							--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	0.02 T	
08/18/75 5711	6H F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
1957/22E-05C(2) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
09/11/75 5711	70 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
1957/22E-05E(1) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
03/03/75 5711	6B F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
09/16/75 5711	51.1	5711	1.00 T	T	0.13 T	0.00 T	0.002 T	--	--	--	0.00 T	0.00 T	0.000 T	0.000 T	--	0.00 T	
1957/22E-05E(2) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
07/02/75 5711	70 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
1957/22E-05E(3) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
05/27/75 5711	69 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.03 T	
1957/22E-06E(1) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
04/01/75 5711	67 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
1957/22E-06E(2) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
03/03/75 5711	69 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
05/22/75 5711	51.1	5711	1.00 T	T	0.00 T	0.000 T	0.001 T	--	--	--	0.000 T	0.000 T	0.000 T	0.000 T	--	0.00 T	
1957/22E-06E(3) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
08/18/75 5711	71 F	5711	--	--	--	--	--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	0.03 T	
1957/22E-07A(1) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
04/01/75 5711	67 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
1957/22E-07C(2) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
08/18/75 5711	71 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.01 T	
1957/24E-07E(1) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.01 T	
10/07/74 5711	41.4	67 F	7.9	--	--	--	--	--	--	--	0.02 T	0.00 T	0.00 T	--	--	0.02 T	
05/29/75 5711	6B F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
1957/24E-07E(2) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
04/19/75 5711	67 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.03 T	
1957/24E-07N(1) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.03 T	
07/03/75 5711	67 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.03 T	
1957/24E-08A(1) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.03 T	
04/16/75 5711	66 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
1957/24E-08A(2) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.00 T	
05/29/75 5711	67 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.01 T	
1957/24E-08N(1) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.01 T	
01/17/75 5711	65 F	5711	--	--	--	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
1957/24E-08N(2) H							--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	0.02 T	
10/07/74 5711	205	67 F	7.9	--	--	--	--	--	--	--	0.81 T	0.00 T	0.00 T	--	--	0.04 T	

TABLE E-2 (Continued)
MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMPLE LAB	DEPTH FT	DISCH. EC	TEMP °F	PH	ARSENIC PPM	CONSTITUENTS IN MILLIGRAMS PER LITTER						LEAD PPM	MERCURY SELENIUM PPM	SILVER ZINC PPM	PBM	
							BARIUM CHPDW (ALL)	CADMIUM CHROM (MTX)	COPPER IRON	MANGANESE IRON	LEAD IRON						
CENTRAL VALLEY SAN JOAQUIN VALLEY																	
10/08/75	5701	65	F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.01 T	--	
04/16/75	5701	185/25E-14n01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.01 T	--	
10/08/75	5701	5701	237	66 F	7.2	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.07 T	--	
02/04/75	5701	5701	64	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
06/06/75	5701	5701	185/25E-19n01	M	--	0.002 T	0.007 T	0.001 T	--	--	0.000 T	0.300 T	0.000 T	--	--	--	
04/17/75	5701	5701	66	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.00 T	--	
02/25/75	5701	5701	185/25E-21E01	M	--	0.030 T	0.004 T	0.000 T	0.00 T	0.00 T	0.00 T	0.000 T	0.001 T	--	0.00 T	--	
09/29/75	5701	5701	60	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.01 T	--	
10/08/75	5701	185/25E-23C01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.01 T	--	
09/02/75	5701	5701	65	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
10/08/75	5701	185/25E-27P01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.00 T	--	
09/02/75	5701	5701	65	F	--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	--	0.04 T	--	
04/16/75	5701	5701	185/25E-28R01	M	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.00 T	--	
03/21/75	5701	5701	64	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.05 T	--	
10/08/75	5701	185/25E-29R01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
05/29/75	5701	5701	64	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.03 T	--	
10/08/75	5701	185/25E-29C01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
02/04/75	5701	5701	64	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
10/08/75	5701	185/25E-30F01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.01 T	--	
03/21/75	5701	5701	64	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.01 T	--	
10/08/75	5701	185/25E-30R01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.01 T	--	
10/07/74	5701	5701	66 F	39H	7.4	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.08 T	--	
09/02/75	5701	5701	66	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.03 T	--	
10/08/75	5701	185/25E-31H02	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
05/29/75	5701	5701	67	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.03 T	--	
10/08/75	5701	185/25E-31J01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
02/04/75	5701	5701	65	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
04/17/75	5701	5701	185/25E-31A01	M	--	0.000 T	0.004 T	0.000 T	--	--	0.00 T	0.000 T	--	--	--	--	
09/02/75	5701	5701	66	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.01 T	--	
10/08/75	5701	185/25E-31E01	M	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.02 T	--	
02/04/75	5701	5701	65	F	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	0.05 T	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAHP LAB	DEPTH FT	DISCH EC	TEMP PH	CONSTITUENTS IN MILLIGRAMS PER LITER	LEAD	MERCURY	SILVER	ZINC	REM		
					ARSENIC	CADIUM	CHROM (ALL)	COPPER	IRON	MANGANESE	SELENIUM	
CENTRAL VALLEY SAN JUANIN VALLEY												
195/25E-32H01 H												
03/19/75 57J1 57J1					0.006 T 0.000 T	0.001 T --	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.001 T	
195/25E-32E01 H												
05/29/75 57J1 57J1		65 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.001 T
195/25E-32E02 H												
05/29/75 57J1 57J1		65 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.001 T
195/25E-32G01 H												
04/18/75 57J1 57J1		66 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.02 T
09/19/75 57J1 57J1					0.10 T 0.000 T	--	--	--	0.000 T 0.000 T	--	--	--
195/25E-32G01 H												
07/03/75 57J1 57J1		66 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.000 T
195/24E-01G01 H												
04/16/75 57J1 57J1		66 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.000 T
195/24L-02H01 H												
09/02/75 57J1 57J1		67 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.01 T
195/25E-05H01 H												
10/07/74 57J1 57J1	21P	65 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.01 T
10/07/74 57J1 57J1					0.005 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	0.0005 T 0.0000 T	0.0005 T 0.0000 T	0.03 T
07/03/75 57J1 57J1		66 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.06 T
195/25E-01A01 H												
07/03/75 57J1 57J1		66 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.06 T
195/25E-06H01 H												
07/03/75 57J1 57J1		65 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.03 T
195/25E-07A01 H												
04/16/75 57J1 57J1		65 F		--	--	--	0.000 T 0.000 TT	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.04 T
195/25E-19E02 H												
10/07/74 57J1 57J1	197	67 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.01 T
02/04/75 57J1 57J1		65 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.02 T
195/25E-19E03 H												
04/17/75 57J1 57J1		65 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.03 T
245/27E-23H01 H												
02/12/75 57J1 57J1		66 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.00 T
245/27L-24N01 H												
10/09/74 57J1 57J1	227	63 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.04 T
03/24/75 57J1 57J1		62 F		--	--	--	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	--	--	0.01 T
245/27L-25D02 H												
05/12/75 57J1 57J1		66 F		--	0.007 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	0.000 T 0.000 T	0.0000 T 0.0000 T	0.0000 T 0.0000 T	0.00 T
245/27L-25G01 H												
08/04/75 57J1 57J1		65 F		--	--	--	0.000 T 0.010 T	0.000 T 0.010 T	0.000 T 0.000 T	--	--	0.04 T

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAAP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	CONSTITUENTS IN MILLIGRAMS PER LITER								MERCURY	SILVER	ZINC	IRON	
						BARIUM	CHROM (ALL)	COPPER	IRON	LEAD	MANGANESE	SELENIUM	ZINC					
CENTRAL VALLEY SAN JACQUIN VALLEY																		
294/27E-25Rn1	H																	
01/13/75	5701	65	F	--	--	--	--	0.00	T	--	--	--	--	--	--	0.03	T	
	5731							0.00	T	0.00	T							
294/27E-26J01	H															--	0.04	T
07/07/75	5701	65	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.04	T
	5731							0.00	T	0.00	T							
294/27E-35A02	H																	
08/04/75	5701	68	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.06	T
	5731							0.00	T	0.00	T							
294/27E-35F01	H																	
03/24/75	5701	65	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.03	T
	5731							0.00	T	0.00	T							
294/27E-35G01	H																	
08/04/75	5701	67	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.06	T
	5731							0.00	T	0.00	T							
294/27E-36H01	H																	
09/09/75	5701	67	F	--	--	--	--	0.01	T	--	--	--	--	--	--	--	0.00	T
	5731							0.01	T	0.00	T							
294/27E-38K01	H																	
10/18/74	5701	65	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.02	T
	5731	250	7.5	--	--	--	--	0.00	T	0.00	T							
08/04/75	5701	66	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.00	T
	5731							0.00	T	0.00	T							
294/27E-38K02	H																	
10/18/74	5701	66	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.00	T
	5731	250	7.4	--	--	--	--	0.00	T	0.00	T							
03/24/75	5701	65	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.01	T
	5731							0.00	T	0.00	T							
294/28E-16E01	H																	
08/04/75	5701	66	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.05	T
	5731							0.00	T	0.00	T							
294/28E-16H01	H																	
02/12/75	5701	71	F	--0.0000	T	0.14	T	0.000	T	0.00	T	0.0000	T	0.0000	T	0.01	T	
	5731							0.0000	T	0.0000	T							
02/18/75	5701	70	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.02	T
	5731							0.00	T	0.00	T							
295/28E-18Q01	H																	
06/04/75	5701	78	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.01	T
	5731							0.00	T	0.00	T							
295/28E-18R01	H																	
07/07/75	5701	78	F	--	--	--	--	0.01	T	--	--	--	--	--	--	--	0.02	T
	5731							0.02	T	0.00	T							
295/28E-17Q01	H																	
06/04/75	5701	70	F	--	--	--	--	0.30	T	--	--	--	--	--	--	--	0.03	T
	5731							0.06	T	0.60	T							
295/28E-19J02	H																	
01/13/75	5701	67	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.04	T
	5731							0.00	T	0.00	T							
295/28E-19J03	H																	
01/13/75	5701	69	F	--	--	--	--	0.01	T	--	--	--	--	--	--	--	0.03	T
	5731							0.00	T	0.00	T							
295/28E-19L01	H																	
03/24/75	5701	65	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.01	T
	5731							0.00	T	0.00	T							
295/28E-19N02	H																	
08/04/75	5701	68	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.04	T
	5731							0.00	T	0.00	T							
295/28E-19Q01	H																	
06/04/75	5701	66	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.00	T
	5731							0.00	T	0.00	T							
295/28E-20A01	H																	
02/12/75	5701	73	F	--	--	--	--	0.00	T	--	--	--	--	--	--	--	0.02	T
	5731							0.00	T	0.00	T							

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE	SAMP	DISCH	TEMP	CONSTITUENTS IN MILLIONTHS PER LITER	LEAD	MERCURY	SELENIUM	SILVER	ZINC	REM
TIME	LAB	DEPTH	FC	PH	BARIUM	CHROM (ALL)	COPPER	VANADIUM	WATER	
					CADMIUM	CHROM (HEX)	IRON			
CENTRAL VALLEY SAN JACOVID VALLEY										
24S/28L-20G02 M										
03/24/75	57J1		72	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-20H01 M										
05/05/75	57J1		76	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-20L01 M										
05/05/75	57J1		72	F	--	--	--	0.01	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-21C01 M										
07/07/75	57J1		77	F	--	--	--	0.01	T	--
	57J1				--	--	--	0.08	T	--
24S/28L-21D01 M										
07/07/75	57J1		76	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-21E01 M										
03/24/75	57J1		76	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.02	T	--
24S/28L-21G01 M										
05/05/75	57J1		78	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.01	T	--
24S/28L-21N01 M										
01/13/75	57J1		76	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-20D01 M										
01/13/75	57J1		70	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-20P01 M										
06/06/75	57J1		70	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-20R01 M										
06/06/75	57J1		70	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-24J01 M										
06/06/75	57J1		80	F	--	0.03	T	--	0.00	T
	57J1				--	0.009	T	--	0.000	T
24S/28L-30A01 M										
09/09/75	57J1		68	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-31F02 M										
06/04/75	57J1		68	F	--	--	--	0.01	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-33G01 M										
07/07/75	57J1		67	F	--	--	--	0.01	T	--
	57J1				--	--	--	0.02	T	--
24S/28L-30H02 M										
07/07/75	57J1		68	F	--	--	--	0.01	T	--
	57J1				--	--	--	0.01	T	--
24S/28L-30K02 M										
11/11/74	57J1		68	F	--	--	--	0.00	T	--
	57J1		324	7A	--	--	--	0.00	T	--
24S/28L-30L04 M										
05/05/75	57J1		66	F	--	--	--	0.01	T	--
	57J1				--	--	--	0.01	T	--
24S/28L-30L02 M										
06/04/75	57J1		68	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.04	T	--
24S/28L-30L04 M										
08/04/75	57J1		68	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.00	T	--
24S/28L-31L02 M										
08/04/75	57J1		66	F	--	--	--	0.00	T	--
	57J1				--	--	--	0.02	T	--

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE	TIME	SAMPLE	LAB	DEPTH	DISCH	TEMP	EC	PH	CONSTITUENTS IN MILLIGRAMS PER LITER						LEAD	MANGANESE	MERCURY	SILVER	ZINC	REM
									ARSENIC	BARIUM	CADMIUM	CHROM (ALL)	CHROM (HEX)	COPPER	IRON					
CENTRAL VALLEY SAN JOAQUIN VALLEY																				
06/04/75	295/28E-31B04	5701	M	66	F	--	--	--	--	--	--	0.00	T	--	--	--	--	0.00	T	
06/04/75	295/28E-31B04	5701	M	66	F	--	--	--	--	--	--	0.00	T	--	--	--	--	0.00	T	
05/05/75	295/28E-31F02	5701	M	67	F	0.0000	T	0.017	T	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.03 T
01/13/75	295/28E-31G02	5701	M	67	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.04 T
03/13/75	295/28E-31G02	5701	M	67	F	0.0040	T	0.0000	T	0.0001	T	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.00 T
01/13/75	295/28E-31J02	5701	M	67	F	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.04 T
01/13/75	295/28E-31J02	5701	M	67	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.04 T
01/13/75	295/28E-31K02	5701	M	67	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.04 T
08/04/75	295/28E-31Q03	5701	M	69	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.05 T
03/24/75	295/28E-32K01	5701	M	66	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.01 T
06/04/75	295/28E-32P01	5701	M	70	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.02 T
08/04/75	295/28E-32R01	5701	M	71	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.02 T
07/07/75	295/28E-32R01	5701	M	70	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.04 T
08/04/75	295/28E-32R02	5701	M	71	F	--	--	--	--	--	--	0.0000	T	0.0000	T	0.0000	T	0.0000	T	0.03 T
05/14/75	295/28E-34J01	5701	M	77	F	--	--	--	--	--	--	0.002	T	0.002	T	0.002	T	0.002	T	0.06 T
05/05/75	295/28E-35E03	5701	M	78	F	--	--	--	--	--	--	0.031	T	0.000	T	0.000	T	0.000	T	0.04 T
05/14/75	295/28E-35E03	5701	M	79	F	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.02 T
05/14/75	295/28E-01R02	5701	M	77	F	--	--	--	--	--	--	0.002	T	0.002	T	0.002	T	0.002	T	0.06 T
05/05/75	295/28E-01R02	5701	M	66	F	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.03 T
03/05/27E-01G02	5701	M	68	F	--	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.03 T
07/07/75	305/27E-01J01	5701	M	66	F	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.01 T
03/05/27E-01J01	5701	M	66	F	--	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.01 T
05/05/75	305/27E-01K01	5701	M	67	F	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.02 T
305/27E-01M01	5701	M	65	F	--	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.02 T
09/09/75	305/27E-01M01	5701	M	65	F	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.05 T
305/27E-02A02	5701	M	65	F	--	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.05 T
01/13/75	305/27E-02A02	5701	M	65	F	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.05 T
305/27E-02F01	5701	M	67	F	--	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.05 T
08/04/75	305/27E-02F01	5701	M	67	F	--	--	--	--	--	--	0.000	T	0.000	T	0.000	T	0.000	T	0.05 T

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE	TIME*	SAMP	LAB	DEPTH	DISCH	EC	TEMP	PH	CONSTITUENTS IN MILLIGRAMS PER LITER						LEAD	MANGANESE	MERCURY	SELENIUM	SILVER	ZINC	REM
									ASPHENIC BROMIDE	CALCIUM CHROM (HEX)	COPPER	IRON	MANGANESE	SELENIUM							
CENTRAL VALLEY SAN JOAQUIN VALLEY																					
31/8/75	27E-02H01	H							--	--	--	--	--	--	--	--	--	--	0.05	T	
09/09/75	57J1																				
57J1																					
31/8/75	27E-02D01	H																			
10/09/74	57J1																				
57J1									65 F	7.2	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-11H01	H																			
10/09/74	57J1																				
57J1									65 F	7.2	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-11D02	H																			
02/12/75	57J1																				
57J1									65 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-11H01	H																			
10/09/74	57J1																				
57J1									65 F	7.2	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-11D02	H																			
10/07/74	57J1																				
57J1																					
31/8/75	27E-12H01	H																			
05/05/75	57J1																				
57J1									67 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-12D01	H																			
10/09/74	57J1																				
57J1									65 F	7.2	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-12H01	H																			
09/09/75	57J1																				
57J1									67 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-12D01	H																			
10/09/74	57J1																				
57J1									65 F	7.2	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-13H01	H																			
10/09/74	57J1																				
57J1									65 F	7.2	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-13D01	H																			
02/12/75	57J1																				
57J1									64 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-13H02	H																			
02/10/75	57J1																				
57J1									66 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-13D02	H																			
10/09/74	57J1																				
57J1									64 F	7.6	--	--	--	--	--	--	--	--	--	--	
02/12/75	57J1																				
57J1									64 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-23C01	H																			
05/05/75	57J1																				
57J1									64 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-23C04	H																			
07/07/75	57J1																				
57J1									68 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-23C03	H																			
05/05/75	57J1																				
57J1									64 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-23C04	H																			
07/07/75	57J1																				
57J1									67 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	27E-23D01	H																			
03/24/75	57J1																				
57J1									64 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	28E-05H01	H																			
01/13/75	57J1																				
57J1									67 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	28E-05D01	H																			
09/10/75	57J1																				
57J1									67 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	28E-05H01	H																			
01/13/75	57J1																				
57J1									66 F	--	--	--	--	--	--	--	--	--	--	--	
31/8/75	28E-05D01	H																			
02/03/75	57J1																				
57J1									68 F	--	--	--	--	--	--	--	--	--	--	--	

TABLE E-2 (Continued)
MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMPLE LAB	DEPTH	DISCH. FC	TEMP PH	CONSTITUENTS IN MILLIGRAMS PER LITER								LEAD	MANGANESE	MERCURY	SELENIUM	SILVER	ZINC	REM
					ARSENIC	CADMIUM	CHROM (ALL)	CHROM (EX)	COPPER	IRON	MANGANESE	SELENIUM							
CENTRAL VALLEY SAN JACOQUIN VALLEY																			
305/28E=05K01		M			--	--	--	--	7.80 T	--	--	--	--	--	--	--	--	--	
03/24/75 5701	5701	68	F	--	--	--	--	--	6.00 T	0.00 T	--	--	--	--	--	--	0.01 T		
305/28E=05N01		M			--	--	--	--	3.80 T	2.80 T	0.00 T	--	--	--	--	--	0.04 T		
02/12/75 5701	5701	70	F	--	--	--	--	--	0.00 T	0.00 T	--	--	--	--	--	--	--		
305/28E=06C02		M			--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.05 T		
09/10/75 5701	5701	66	F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.05 T		
305/28E=06C03		M			--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.04 T		
05/05/75 5701	5701	66	F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.04 T		
305/28E=06G02		M			--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.05 T		
08/04/75 5701	5701	67	F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.05 T		
305/28E=06H02		M			--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.05 T		
03/24/75 5701	5701	66	F	0.000 T	0.000 T	0.000 T	0.000 T	0.000 T	0.00 T	0.00 T	0.00 T	0.000 T	0.000 T	0.000 T	0.000 T	0.000 T	0.000 T		
305/28E=07C01		M			--	--	--	--	--	--	--	--	--	--	--	--	--		
09/09/75 5701	5701	68	F	--	--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	--	--	--	0.07 T		
305/28E=07E01		M			--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	--	--	--	0.04 T		
07/07/75 5701	5701	68	F	--	--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	--	--	--	0.04 T		
305/28E=08H01		M			--	--	--	--	0.000 T	0.000 T	0.000 T	--	--	--	--	--	0.000 T		
10/07/74 5701	5701	0.0119	T	0.000 T	--	--	0.001 T	0.000 T	0.00 T	0.00 T	0.00 T	0.000 T	0.000 T	0.000 T	0.000 T	0.000 T	0.00 T		
07/07/75 5701	5701	69	F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.00 T		
305/28E=08H02		M			--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.00 T		
01/13/75 5701	5701	72	F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.08 T		
305/28E=17A01		M			--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.08 T		
10/09/74 5701	5701	492	7.9 F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.04 T		
05/05/75 5701	5701	70	F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.02 T		
305/28E=18A01		M			--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.02 T		
09/09/75 5701	5701	66	F	--	--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	--	--	--	0.02 T		
305/28E=18E01		M			--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.02 T		
02/12/75 5701	5701	67	F	--	--	--	--	--	0.00 T	0.00 T	0.00 T	--	--	--	--	--	0.09 T		
09/09/28E=29P01		S			--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	--	--	--	--		
01/06/75 5803	5803			0.01 T	--	--	--	--	0.01 T	0.00 T	0.00 T	--	--	--	--	--	--		

TABLE E-3
SUPPLEMENTAL MINOR ELEMENT ANALYSES OF GROUND WATER

Abbreviations and Codes used in this table are:

Abbreviations

T	Total Concentration
REM	Remarks .

Sampler (SAMP) and Laboratory (LAB) Codes

5701 California Water Service Company

TABLE E-3
SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMPLE NO.	LAD NO.	DEPTH IN FT	U.S.G. FC	TEMP PH	ALUMINUM PPM	CONSTITUENTS IN MILLIGRAMS PER LITER						NICKEL STRONTIUM	TITANIUM VANADIUM	REM
							ANTIMONY PPM	BERYLLO PPM	RUTHENIUM PPM	CORALTE PPM	GALLIUM PPM	LITHIUM PPM	MOLYBDENUM PPM		
CENTRAL VALLEY SAN JOAQUIN VALLEY															
09/11/75 5701	155/22E-31A1	5701	68	F	--	--	--	--	--	--	0.000	T	--	0.32	T
	155/22E-32L01														
09/27/75 5701	155/22E-32L01	5701	70	F	--	--	--	--	--	--	0.002	T	--	0.22	T
	165/22E-05C1														
08/18/75 5701	165/22E-05C1	5701	68	F	--	--	--	--	--	--	0.004	T	--	0.24	T
	165/22E-05C1														
09/11/75 5701	165/22E-05C1	5701	70	F	--	--	--	--	--	--	0.000	T	--	0.20	T
	165/22E-05C1														
03/03/75 5701	165/22E-05C1	5701	68	F	--	--	--	--	--	--	0.004	T	--	0.26	T
	165/22E-05C1														
07/02/75 5701	165/22E-05C1	5701	70	F	--	--	--	--	--	--	0.000	T	--	0.12	T
	165/22E-05C1														
05/27/75 5701	165/22E-05C1	5701	69	F	--	--	--	--	--	--	0.004	T	--	0.32	T
	165/22E-05C1														
04/01/75 5701	165/22E-05C1	5701	67	F	--	--	--	--	--	--	0.004	T	--	0.52	T
	165/22E-05C1														
03/03/75 5701	165/22E-05C1	5701	69	F	--	--	--	--	--	--	0.002	T	--	0.22	T
	165/22E-05C1														
04/18/75 5701	165/22E-05C1	5701	71	F	--	--	--	--	--	--	0.004	T	--	0.30	T
	165/22E-05C1														
04/01/75 5701	165/22E-05C1	5701	67	F	--	--	--	--	--	--	0.004	T	--	0.44	T
	165/22E-05C1														
08/18/75 5701	165/22E-05C1	5701	71	F	--	--	--	--	--	--	0.002	T	--	0.16	T
	165/22E-05C1														
10/07/74 5701	165/22E-05C1	5701	67	F	--	--	--	--	--	--	0.002	T	--	0.44	T
	165/22E-05C1														
05/29/75 5701	165/22E-05C1	5701	68	F	--	--	--	--	--	--	0.002	T	--	0.36	T
	165/22E-05C1														
04/19/75 5701	165/22E-05C1	5701	67	F	--	--	--	--	--	--	0.004	T	--	0.28	T
	165/22E-05C1														
07/03/75 5701	165/22E-05C1	5701	67	F	--	--	--	--	--	--	0.002	T	--	0.24	T
	165/22E-05C1														
04/16/75 5701	165/22E-05C1	5701	68	F	--	--	--	--	--	--	0.000	T	--	0.28	T
	165/22E-05C1														
05/29/75 5701	165/22E-05C1	5701	67	F	--	--	--	--	--	--	0.002	T	--	0.32	T
	165/22E-05C1														
01/17/75 5701	165/22E-05C1	5701	65	F	--	--	--	--	--	--	0.000	T	--	0.34	T
	165/22E-05C1														
10/07/74 5701	165/22E-05C1	5701	67	F	--	--	--	--	--	--	0.002	T	--	0.36	T
	165/22E-05C1														
04/16/75 5701	165/22E-05C1	5701	65	F	--	--	--	--	--	--	0.002	T	--	0.24	T

TABLE E-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	UEPTH	DISCH	TEMP Ph	CONSTITUENTS IN MILLIGRAMS PER LITER									PER
					ALUMINUM	ANTIMONY	BISMUTH	GALLIUM	LITHIUM	MOLYBDENUM	NICKEL	STIBONIUM	TITANIUM	
CENTRAL VALLEY SAN JOAQUIN VALLEY														
10/08/74 5701	165/25E-14N02 5701	237	66 7.2	F	--	--	--	--	0.000 T	--	0.20 T	--	--	--
02/04/75 5701			64	F	--	--	--	--	0.000 T	--	0.20 T	--	--	--
	165/25E-19N01 5701			H										
04/17/75 5701	165/25E-19N01 5701		66	F	--	--	--	--	0.001 T	--	0.16 T	--	--	--
	165/25E-20E01 5701			H										
02/25/75 5701	165/25E-23C01 5701		60	F	--	--	--	--	0.002 T	--	0.28 T	--	--	--
	165/25E-27N01 5701			H										
09/02/75 5701	165/25E-27N01 5701		65	F	--	--	--	--	0.000 T	--	0.20 T	--	--	--
	165/25E-27P01 5701			H										
09/02/75 5701	165/25E-27P01 5701		65	F	--	--	--	--	0.000 T	--	0.12 T	--	--	--
	165/25E-28G01 5701			H										
04/16/75 5701	165/25E-28G01 5701		64	F	--	--	--	--	0.002 T	--	0.22 T	--	--	--
	165/25E-28L01 5701			H										
03/21/75 5701	165/25E-28L01 5701		64	F	--	--	--	--	0.000 T	--	0.28 T	--	--	--
	165/25E-29H01 5701			H										
05/29/75 5701	165/25E-29H01 5701		64	F	--	--	--	--	0.002 T	--	0.20 T	--	--	--
	165/25E-29C01 5701			H										
02/04/75 5701	165/25E-29C01 5701		64	F	--	--	--	--	0.000 T	--	0.14 T	--	--	--
	165/25E-29R01 5701			H										
02/04/75 5701	165/25E-29R01 5701		64	F	--	--	--	--	0.000 T	--	0.24 T	--	--	--
	165/25E-30F01 5701			H										
03/21/75 5701	165/25E-30F01 5701		66	F	--	--	--	--	0.000 T	--	0.22 T	--	--	--
	165/25E-30Pn1 5701			H										
10/07/74 5701	165/25E-30Pn1 5701	39A 7.0	66 7.0	F	--	--	--	--	0.002 T	--	0.50 T	--	--	--
09/02/75 5701	165/25E-30Pn1 5701		66	F	--	--	--	--	0.012 T	--	0.52 T	--	--	--
	165/25E-31Rn2 5701			H										
05/29/75 5701	165/25E-31Rn2 5701		67	F	--	--	--	--	0.000 T	--	0.28 T	--	--	--
	165/25E-31H01 5701			H										
02/04/75 5701	165/25E-31H01 5701		65	F	--	--	--	--	0.000 T	--	0.26 T	--	--	--
	165/25E-31M03 5701			H										
09/02/75 5701	165/25E-31M03 5701		66	F	--	--	--	--	0.000 T	--	0.40 T	--	--	--
	165/25E-31E01 5701			H										
09/02/75 5701	165/25E-31E01 5701		66	F	--	--	--	--	0.000 T	--	0.30 T	--	--	--
	165/25E-31K01 5701			H										
02/04/75 5701	165/25E-31K01 5701		65	F	--	--	--	--	0.000 T	--	0.22 T	--	--	--
	165/25E-31Rn1 5701			H										
03/19/75 5701	165/25E-31Rn1 5701		66	F	--	--	--	--	0.000 T	--	0.28 T	--	--	--
	165/25E-32E01 5701			H										
05/29/75 5701	165/25E-32E01 5701		65	F	--	--	--	--	0.002 T	--	0.24 T	--	--	--

TABLE E-3 (Continued)
SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	CONSTITUENTS IN MILLIGRAMS PER LITER								NICKEL STHONTIUM	TITANIUM VANADIUM	REM
					ALUMINUM	ANTIMONY	BERYLLIUM	RISMUTH	GALLIUM	LITHIUM	MOLYBDENUM	TUNGSTEN			
CENTRAL VALLEY SAN JOAQUIN VALLEY															
1845/25E-32E02	5701 5701	M	65	F	--	--	--	--	--	0.000 T	--	0.26 T	--	--	--
1845/25E-32E01	5701 5701	M	66	F	--	--	--	--	--	0.001 T	--	0.30 T	--	--	--
1845/25E-32E01	5701 5701	M	66	F	--	--	--	--	--	0.003 T	--	0.22 T	--	--	--
1845/24E-01E01	5701 5701	M	65	F	--	--	--	--	--	0.004 T	--	0.54 T	--	--	--
1845/24E-01E01	5701 5701	M	64	F	--	--	--	--	--	0.004 T	--	0.56 T	--	--	--
1845/24E-01E01	5701 5701	M	67	F	--	--	--	--	--	0.000 T	--	0.42 T	--	--	--
1845/25E-05E01	5701 5701	M	65	F	--	--	--	--	--	0.000 T	--	0.24 T	--	--	--
10/07/74 5701 5701	210	B+	--	--	--	--	--	--	--	0.000 T	--	0.26 T	--	--	--
07/03/75 5701 5701	66	F	--	--	--	--	--	--	--	0.00 T	--	0.22 T	--	--	--
1845/25E-06E01	5701 5701	M	66	F	--	--	--	--	--	0.000 T	--	0.22 T	--	--	--
07/03/75 5701 5701	65	F	--	--	--	--	--	--	--	0.002 T	--	0.38 T	--	--	--
1845/25E-07E01	5701 5701	M	65	F	--	--	--	--	--	0.001 T	--	0.44 T	--	--	--
1845/25E-19E02	5701 5701	M	67	F	--	--	--	--	--	0.000 T	--	0.36 T	--	--	--
04/17/75 5701 5701	147	B+	--	--	--	--	--	--	--	0.002 T	--	0.42 T	--	--	--
1845/25E-19E03	5701 5701	M	65	F	--	--	--	--	--	0.002 T	--	0.42 T	--	--	--
02/12/75 5701 5701	66	F	--	--	--	--	--	--	--	0.006 T	--	0.22 T	--	--	--
1845/27E-24E01	5701 5701	M	64	F	--	--	--	--	--	0.005 T	--	0.20 T	--	--	--
10/09/74 5701 5701	227	7.1	--	--	--	--	--	--	--	0.005 T	--	0.20 T	--	--	--
03/24/75 5701 5701	62	F	--	--	--	--	--	--	--	0.006 T	--	0.02 T	--	--	--
2945/27E-25E02	5701 5701	M	64	F	--	--	--	--	--	0.000 T	--	0.26 T	--	--	--
05/12/75 5701 5701	64	F	--	--	--	--	--	--	--	0.000 T	--	0.26 T	--	--	--
2945/27E-25E03	5701 5701	M	65	F	--	--	--	--	--	0.004 T	--	0.23 T	--	--	--
2945/27E-25E01	5701 5701	M	65	F	--	--	--	--	--	0.004 T	--	0.24 T	--	--	--
2945/27E-27A01	5701 5701	M	65	F	--	--	--	--	--	0.004 T	--	0.22 T	--	--	--
2945/27E-35A02	5701 5701	M	64	F	--	--	--	--	--	0.006 T	--	0.19 T	--	--	--
2945/27E-35E01	5701 5701	M	65	F	--	--	--	--	--	0.006 T	--	0.27 T	--	--	--

TABLE E-3 (Continued)
SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE	SAMP	LAB	DEPTH	DISCH	TEMP	PH	ALUMINUM	CANTIMONY	MILLIGRAMS PER LITER	GALLIUM	GERMANIUM	LITHIUM	NICKEL	TITANIUM	VANADIUM	RHM
CENTRAL VALLEY SAN JACINTO VALLEY																
08/04/75	5701		35001	H	67	F	--	--	--	--	--	0.004 T	--	--	--	--
	5701											--	0.19 T	--	--	--
09/09/75	5701		295/27E-36H01	H	67	F	--	--	--	--	--	0.010 T	--	--	--	--
	5701											--	0.22 T	--	--	--
10/18/74	5701		245/27E-36K01	H	65	F	--	--	--	--	--	0.005 T	--	--	--	--
	5701		250	7.5	250		--	--	--	--	--	--	0.28 T	--	--	--
08/04/75	5701		295/27E-36K02	H	60	F	--	--	--	--	--	0.011 T	--	--	--	--
	5701											--	0.26 T	--	--	--
10/18/74	5701		295/28E-16A01	H	66	F	--	--	--	--	--	0.008 T	--	--	--	--
	5701											--	0.25 T	--	--	--
03/24/75	5701		295/28E-16A01	H	65	F	--	--	--	--	--	0.000 T	--	--	--	--
	5701											--	0.28 T	--	--	--
08/04/75	5701		295/28E-16H01	H	71	F	--	--	--	--	--	0.002 T	--	--	--	--
	5701											--	0.44 T	--	--	--
02/18/75	5701		295/28E-16H01	H	70	F	--	--	--	--	--	0.000 T	--	--	--	--
	5701											--	0.46 T	--	--	--
06/04/75	5701		295/28E-16Q01	H	70	F	--	--	--	--	--	0.004 T	--	--	--	--
	5701											--	0.68 T	--	--	--
07/07/75	5701		295/28E-17H01	H	70	F	--	--	--	--	--	0.000 T	--	--	--	--
	5701											--	0.56 T	--	--	--
06/04/75	5701		295/28E-17H01	H	70	F	--	--	--	--	--	0.002 T	--	--	--	--
	5701											--	0.42 T	--	--	--
01/13/75	5701		295/28E-19J02	H	67	F	--	--	--	--	--	0.000 T	--	--	--	--
	5701											--	0.22 T	--	--	--
01/13/75	5701		295/28E-19J03	H	69	F	--	--	--	--	--	0.002 T	--	--	--	--
	5701											--	0.18 T	--	--	--
03/24/75	5701		295/28E-19L01	H	65	F	--	--	--	--	--	0.000 T	--	--	--	--
	5701											--	0.28 T	--	--	--
08/04/75	5701		295/28E-19N02	H	68	F	--	--	--	--	--	0.004 T	--	--	--	--
	5701											--	0.26 T	--	--	--
06/04/75	5701		295/28E-19Q01	H	66	F	--	--	--	--	--	0.002 T	--	--	--	--
	5701											--	0.26 T	--	--	--
02/12/75	5701		295/28E-20A01	H	73	F	--	--	--	--	--	0.002 T	--	--	--	--
	5701											--	0.34 T	--	--	--
03/24/75	5701		295/28E-20G02	H	72	F	--	--	--	--	--	0.000 T	--	--	0.74 T	--
	5701											--				
05/05/75	5701		295/28E-20H01	H	76	F	--	--	--	--	--	0.001 T	--	--	--	--
	5701											--	0.46 T	--	--	--
05/05/75	5701		295/28E-20L01	H	72	F	--	--	--	--	--	0.004 T	--	--	0.50 T	--
	5701											--				
07/07/75	5701		295/28E-21C01	H	77	F	--	--	--	--	--	0.002 T	--	--	0.76 T	--
	5701											--				

TABLE E-3 (Continued)
SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH FC	TEMP PH	CONSTITUENTS IN MILLIGRAMS PER LITER									NICKEL STANIUM	TITANIUM VANADIUM	REM
					ALUMINUM	ANTIMONY	BISMUTH	CORAL	GALLIUM	GERMANIUM	LITHIUM	MOLYBDENUM	TUNGSTEN			
CENTRAL VALLEY SAN JOAQUIN VALLEY																
295/28E-21D01	M	76	F	--	--	--	--	--	0.002	T	--	0.34	T	--	--	--
07/07/75	5701	5701	--	--	--	--	--	--	--	0.000	T	--	0.44	T	--	--
295/28E-21E01	M	76	F	--	--	--	--	--	--	0.000	T	--	0.34	T	--	--
03/24/75	5701	5701	--	--	--	--	--	--	--	0.004	T	--	0.38	T	--	--
295/28E-21G01	M	78	F	--	--	--	--	--	--	0.002	T	--	0.34	T	--	--
05/05/75	5701	5701	--	--	--	--	--	--	--	0.000	T	--	0.30	T	--	--
295/28E-21M01	M	76	F	--	--	--	--	--	--	0.002	T	--	0.34	T	--	--
01/13/75	5701	5701	--	--	--	--	--	--	--	0.002	T	--	0.34	T	--	--
295/28E-24D01	M	70	F	--	--	--	--	--	--	0.000	T	--	0.30	T	--	--
01/13/75	5701	5701	--	--	--	--	--	--	--	0.002	T	--	0.34	T	--	--
295/28E-24L01	M	70	F	--	--	--	--	--	--	0.004	T	--	0.34	T	--	--
08/04/75	5701	5701	--	--	--	--	--	--	--	0.002	T	--	0.28	T	--	--
295/28E-24P01	M	70	F	--	--	--	--	--	--	0.002	T	--	0.28	T	--	--
06/04/75	5701	5701	--	--	--	--	--	--	--	0.002	T	--	0.22	T	--	--
295/28E-24Q01	M	80	F	--	--	--	--	--	--	0.002	T	--	0.36	T	--	--
09/09/75	5701	5701	--	--	--	--	--	--	--	0.002	T	--	0.22	T	--	--
295/28E-31A01	M	68	F	--	--	--	--	--	--	0.008	T	--	0.36	T	--	--
06/04/75	5701	5701	--	--	--	--	--	--	--	0.008	T	--	0.36	T	--	--
295/28E-31G01	M	67	F	--	--	--	--	--	--	0.002	T	--	0.34	T	--	--
07/07/75	5701	5701	--	--	--	--	--	--	--	0.002	T	--	0.28	T	--	--
295/28E-31H01	M	68	F	--	--	--	--	--	--	0.002	T	--	0.28	T	--	--
11/11/74	5701	5701	324	66	F	--	--	--	--	0.002	T	--	0.36	T	--	--
05/05/75	5701	5701	--	--	--	--	--	--	--	0.005	T	--	0.32	T	--	--
295/28E-31Q02	M	68	F	--	--	--	--	--	--	0.010	T	--	0.28	T	--	--
06/04/75	5701	5701	--	--	--	--	--	--	--	0.009	T	--	0.29	T	--	--
295/28E-31Q04	M	68	F	--	--	--	--	--	--	0.009	T	--	0.29	T	--	--
08/04/75	5701	5701	--	--	--	--	--	--	--	0.004	T	--	0.40	T	--	--
295/28E-31H02	M	68	F	--	--	--	--	--	--	0.008	T	--	0.32	T	--	--
06/04/75	5701	5701	--	--	--	--	--	--	--	0.004	T	--	0.40	T	--	--
295/28E-31B04	M	68	F	--	--	--	--	--	--	0.004	T	--	0.40	T	--	--
06/04/75	5701	5701	--	--	--	--	--	--	--	0.014	T	--	0.42	T	--	--
295/28E-31G02	M	67	F	--	--	--	--	--	--	0.002	T	--	0.20	T	--	--
03/13/75	5701	5701	--	--	--	--	--	--	--	0.002	T	--	0.24	T	--	--
295/28E-31J02	M	68	F	--	--	--	--	--	--	0.002	T	--	0.26	T	--	--
01/13/75	5701	5701	--	--	--	--	--	--	--	0.002	T	--	0.26	T	--	--

TABLE B-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	CONSTITUENTS IN MILLIGRAMS PER LITER										LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REMARKS
					ALUMINUM	ANTIMONY	BERYLLIUM	CORAL	GALLIUM	GERMANIUM	IRON	MOLYBDENUM	POTASSIUM	SILICON				
CENTRAL VALLEY SAN JOAQUIN VALLEY																		
08/04/75	5701	60	F	--	--	--	--	--	--	--	--	0.013 T	--	--	--	--	--	--
	5701	29S/28E-31K02 M			--	--	--	--	--	--	--	0.027 T	--	--	--	--	--	--
03/24/75	5701	66	F	--	--	--	--	--	--	--	--	0.012 T	--	--	--	--	--	--
	5701	29S/28E-31Q03 M			--	--	--	--	--	--	--	0.040 T	--	--	--	--	--	--
06/04/75	5701	70	F	--	--	--	--	--	--	--	--	0.006 T	--	--	--	--	--	--
	5701	29S/28E-32D01 M			--	--	--	--	--	--	--	0.006 T	--	--	--	--	--	--
08/04/75	5701	71	F	--	--	--	--	--	--	--	--	0.007 T	--	--	--	--	--	--
	5701	29S/28E-32R01 M			--	--	--	--	--	--	--	0.007 T	--	--	--	--	--	--
07/07/75	5701	70	F	--	--	--	--	--	--	--	--	0.008 T	--	--	--	--	--	--
	5701	29S/28E-32R02 M			--	--	--	--	--	--	--	0.022 T	--	--	--	--	--	--
08/04/75	5701	71	F	--	--	--	--	--	--	--	--	0.010 T	--	--	--	--	--	--
	5701	29S/28E-34J01 M			--	--	--	--	--	--	--	0.033 T	--	--	--	--	--	--
05/14/75	5701	77	F	--	--	--	--	--	--	--	--	0.018 T	--	--	--	--	--	--
	5701	29S/28E-35E03 M			--	--	--	--	--	--	--	0.002 T	--	--	--	--	--	--
05/05/75	5701	78	F	--	--	--	--	--	--	--	--	0.014 T	--	--	--	--	--	--
	5701	31S/27E-01R02 M			--	--	--	--	--	--	--	0.000 T	--	--	--	--	--	--
05/14/75	5701	79	F	--	--	--	--	--	--	--	--	0.000 T	--	--	--	--	--	--
31S/27E-01R02 M																		
05/05/75	5701	66	F	--	--	--	--	--	--	--	--	0.006 T	--	--	--	--	--	--
	5701	31S/27E-01G02 M			--	--	--	--	--	--	--	0.30 T	--	--	--	--	--	--
06/04/75	5701	68	F	--	--	--	--	--	--	--	--	0.022 T	--	--	--	--	--	--
	5701	31S/27E-01J01 M			--	--	--	--	--	--	--	0.068 T	--	--	--	--	--	--
07/07/75	5701	66	F	--	--	--	--	--	--	--	--	0.010 T	--	--	--	--	--	--
	5701	31S/27E-01K01 M			--	--	--	--	--	--	--	0.36 T	--	--	--	--	--	--
05/05/75	5701	67	F	--	--	--	--	--	--	--	--	0.016 T	--	--	--	--	--	--
	5701	31S/27E-01M01 M			--	--	--	--	--	--	--	0.46 T	--	--	--	--	--	--
09/09/75	5701	65	F	--	--	--	--	--	--	--	--	0.014 T	--	--	--	--	--	--
	5701	30S/27E-02A02 M			--	--	--	--	--	--	--	0.36 T	--	--	--	--	--	--
01/13/75	5701	65	F	--	--	--	--	--	--	--	--	0.004 T	--	--	--	--	--	--
	5701	30S/27E-02F01 M			--	--	--	--	--	--	--	0.30 T	--	--	--	--	--	--
08/04/75	5701	67	F	--	--	--	--	--	--	--	--	0.008 T	--	--	--	--	--	--
	5701	30S/27E-02H01 M			--	--	--	--	--	--	--	0.30 T	--	--	--	--	--	--
09/09/75	5701	67	F	--	--	--	--	--	--	--	--	0.006 T	--	--	--	--	--	--
	5701	30S/27E-02P01 M			--	--	--	--	--	--	--	0.38 T	--	--	--	--	--	--
10/09/74	5701	65	F	7.2	--	--	--	--	--	--	--	0.008 T	--	--	--	--	--	--
	5701	30S/27E-11B01 M			--	--	--	--	--	--	--	0.34 T	--	--	--	--	--	--
10/09/74	5701	65	F	7.4	--	--	--	--	--	--	--	0.012 T	--	--	--	--	--	--
	5701	30S/27E-11D02 M			--	--	--	--	--	--	--	0.38 T	--	--	--	--	--	--
02/12/75	5701	65	F	--	--	--	--	--	--	--	--	0.008 T	--	--	--	--	--	--
	5701	30S/27E-11F01 M			--	--	--	--	--	--	--	0.24 T	--	--	--	--	--	--
10/09/74	5701	66	F	--	--	--	--	--	--	--	--	0.014 T	--	--	--	--	--	--
	5701	30S/27E-11H01 M			--	--	--	--	--	--	--	0.25 T	--	--	--	--	--	--

TABLE E-3 (Continued)
SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMPLE LAB	DEPTH FT	DISCH. PC	TEMP °F	P.H.	CONSTITUENTS IN MILLIGRAMS PER LITER									REM
						ALUMINUM	ANTIMONY	BISMUTH	CORAL	GALLIUM	LITHIUM	MOLYBDENUM	NICKEL	STRONTIUM	TITANIUM
CENTRAL VALLEY SAN JACINTO VALLEY															
305/27E-12L02						--	--	--	--	--	0.024 T	--	0.52 T	--	--
05/05/75	5701			67	F	--	--	--	--	--	--	--	--	--	--
	5701			305/27E-12N12	M										
10/09/74	5701			64	F	--	--	--	--	--	0.016 T	--	0.44 T	--	--
	5701			405	7.3	--	--	--	--	--	--				
				305/27E-12R01	M										
09/09/75	5701			67	F	--	--	--	--	--	0.014 T	--	0.24 T	--	--
	5701			305/27E-13C01	M										
10/09/74	5701			65	F	--	--	--	--	--	0.015 T	--	0.38 T	--	--
	5701			349	7.1	--	--	--	--	--	--				
				305/27E-13H01	M										
02/12/75	5701			64	F	--	--	--	--	--	0.010 T	--	0.28 T	--	--
	5701			305/27E-13H02	M										
02/18/75	5701			66	F	--	--	--	--	--	0.012 T	--	0.28 T	--	--
	5701			305/27E-14H02	M										
10/09/74	5701			64	F	--	--	--	--	--	0.010 T	--	0.26 T	--	--
	5701			262	7.4	--	--	--	--	--	--				
02/12/75	5701			64	F	--	--	--	--	--	0.008 T	--	0.24 T	--	--
	5701			305/27L-21C02	M										
07/07/75	5701			68	F	--	--	--	--	--	0.012 T	--	0.34 T	--	--
	5701			305/27E-23C03	M										
05/05/75	5701			64	F	--	--	--	--	--	0.014 T	--	0.36 T	--	--
	5701			305/27E-23C04	M										
07/07/75	5701			67	F	--	--	--	--	--	0.014 T	--	0.36 T	--	--
	5701			305/27L-23H01	M										
03/24/75	5701			64	F	--	--	--	--	--	0.010 T	--	0.22 T	--	--
	5701			305/28L-05H01	M										
02/12/75	5701			70	F	--	--	--	--	--	0.012 T	--	0.54 T	--	--
	5701			305/28L-05C01	M										
09/10/75	5701			67	F	--	--	--	--	--	0.018 T	--	0.42 T	--	--
	5701			305/28E-05F01	M										
01/13/75	5701			66	F	--	--	--	--	--	0.008 T	--	0.42 T	--	--
	5701			305/28E-05F01	M										
02/03/75	5701			68	F	--	--	--	--	--	0.010 T	--	0.40 T	--	--
	5701			305/28L-05K01	M										
03/24/75	5701			68	F	--	--	--	--	--	0.010 T	--	0.38 T	--	--
	5701			305/28E-05C02	M										
09/10/75	5701			66	F	--	--	--	--	--	0.013 T	--	0.42 T	--	--
	5701			305/28E-05K04	M										
05/05/75	5701			68	F	--	--	--	--	--	0.018 T	--	0.40 T	--	--
	5701			305/28E-05G02	M										
08/04/75	5701			67	F	--	--	--	--	--	0.014 T	--	0.42 T	--	--
	5701			305/28L-06M02	M										
03/24/75	5701			66	F	--	--	--	--	--	0.006 T	--	0.32 T	--	--

TABLE E-3 (Continued)
SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF UNWOUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH FC	TEMP DH	CONSTITUENTS IN MILLIGRAMS PER LITER									NICKEL STHONTIUM	TITANIUM VANADIUM	REH
					ALUMINUM	ANTIMONY	RUTHENIUM	GALLIUM	LITHIUM	MOLYBDENUM	NICKEL	TITANIUM	VANADIUM			
CENTRAL VALLEY SAN JOAQUIN VALLEY																
305/28E-07C01	5701	M		68	F	--	--	--	--	--	0.018 T	--	0.42 T	--	--	
09/09/75	5701			5701												
305/28E-07E01	5701	M				68	F	--	--	--	0.016 T	--	0.36 T	--	--	
07/07/75	5701			5701												
305/28E-08A01	5701	M									0.010 T	--	0.46 T	--	--	
07/07/75	5701			5701												
305/28E-08M02	5701	M				69	F	--	--	--	--					
01/13/75	5701			0001							0.008 T	--	0.26 T	--	--	
305/28E-17A01	5701	M														
10/09/74	5701			5701							0.016 T	--	0.54 T	--	--	
				442		70	F	--	--	--	--					
						70	F	--	--	--	0.020 T	--	0.50 T	--	--	
305/28E-18A01	5701	M														
09/09/75	5701			5701							0.018 T	--	0.41 T	--	--	
305/28E-18E01	5701	M														
02/12/75	5701			5701							0.014 T	--	0.42 T	--	--	

LEGEND

— DISTRICT OR AREA BOUNDARIES

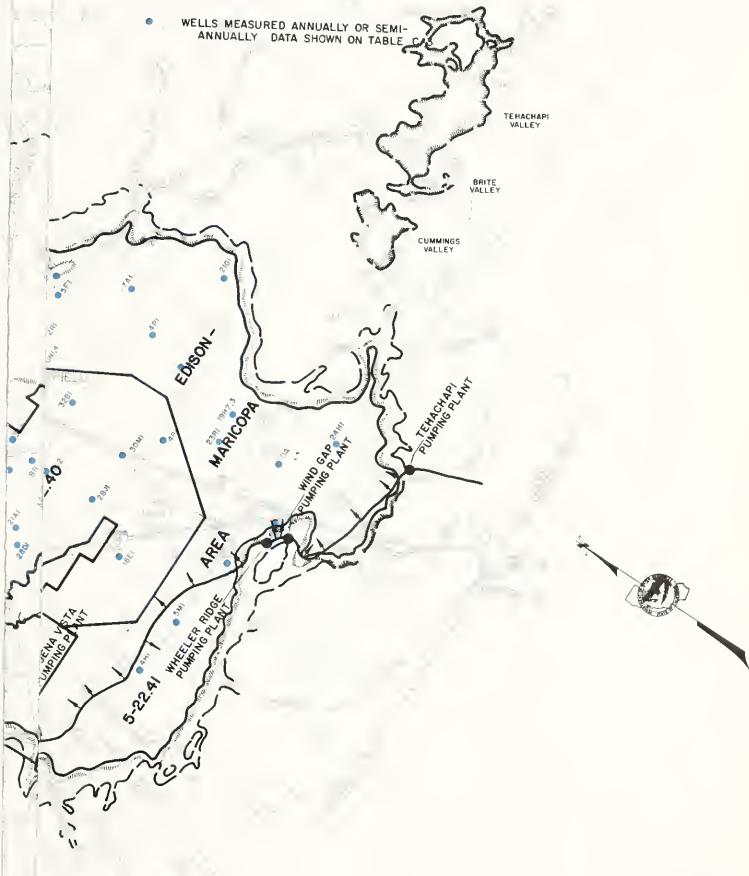
5-22.00 NUMBERS INDICATE CODE CLASSIFICATION

FOOTHILL LINE

BEDROCK LINE

CALIFORNIA AQUEDUCT AND TURNOUTS

● WELLS MEASURED ANNUALLY OR SEMI-ANNUALLY DATA SHOWN ON TABLE

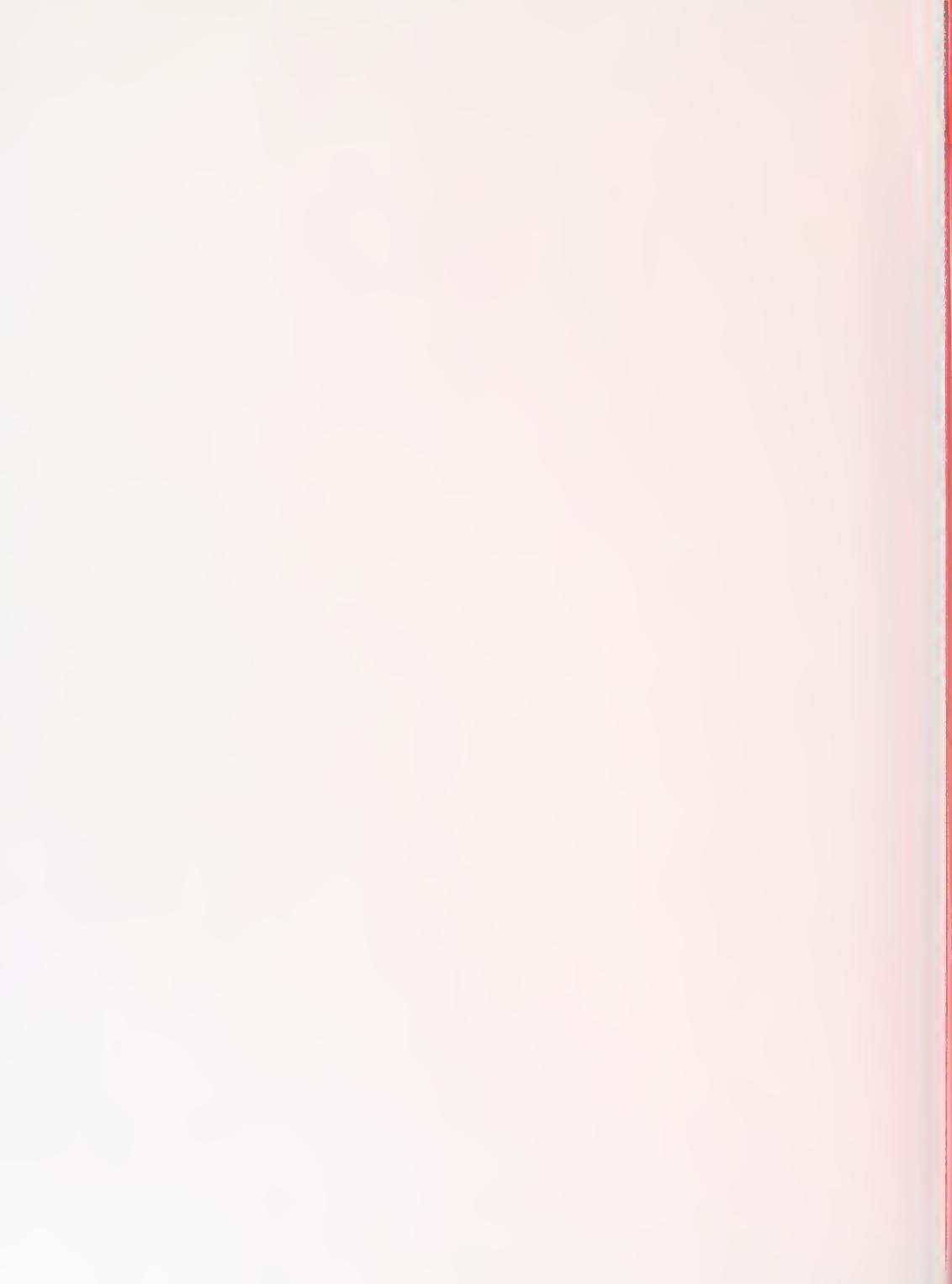


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN DISTRICT

HYDROLOGIC DATA 1975

GROUND WATER AREAS AND
SELECTED OBSERVATION WELLS

SCALE OF MILES
0 6 12





STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN DISTRICT
HYDROLOGIC DATA 1975

GROUND WATER AREAS AND
SELECTED OBSERVATION WELLS

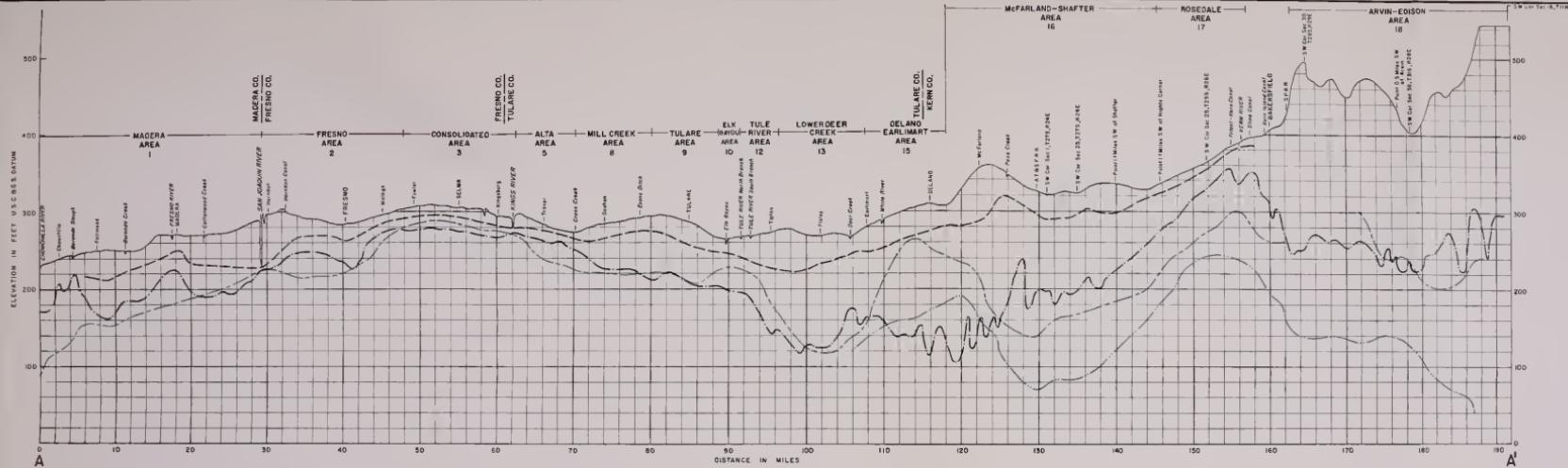
MILE OF WATER



1

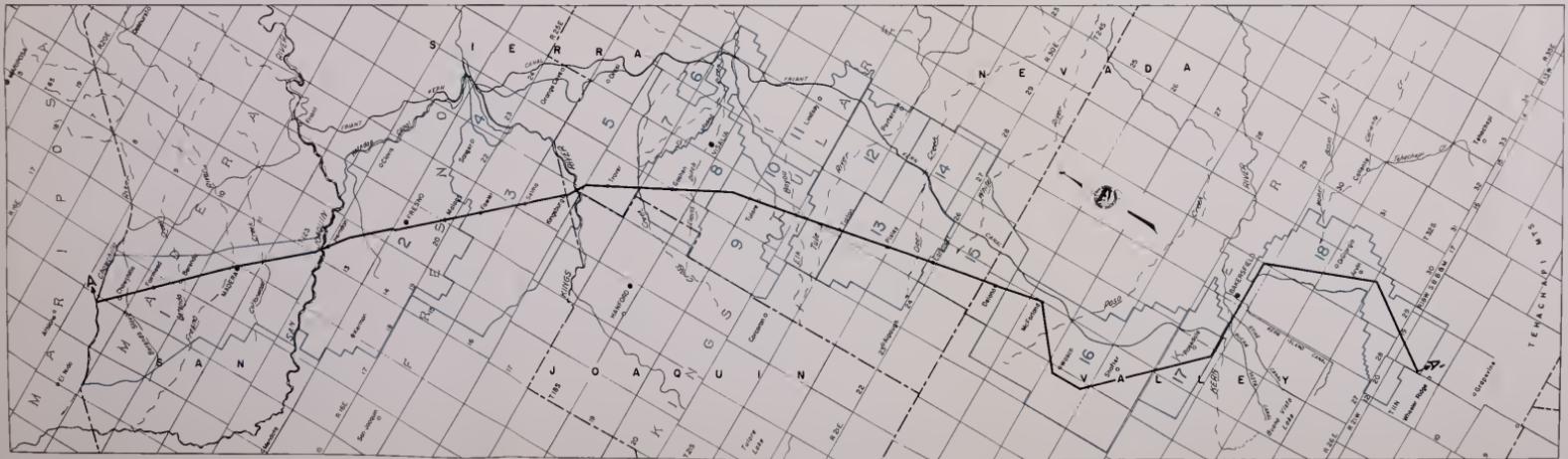
108

11

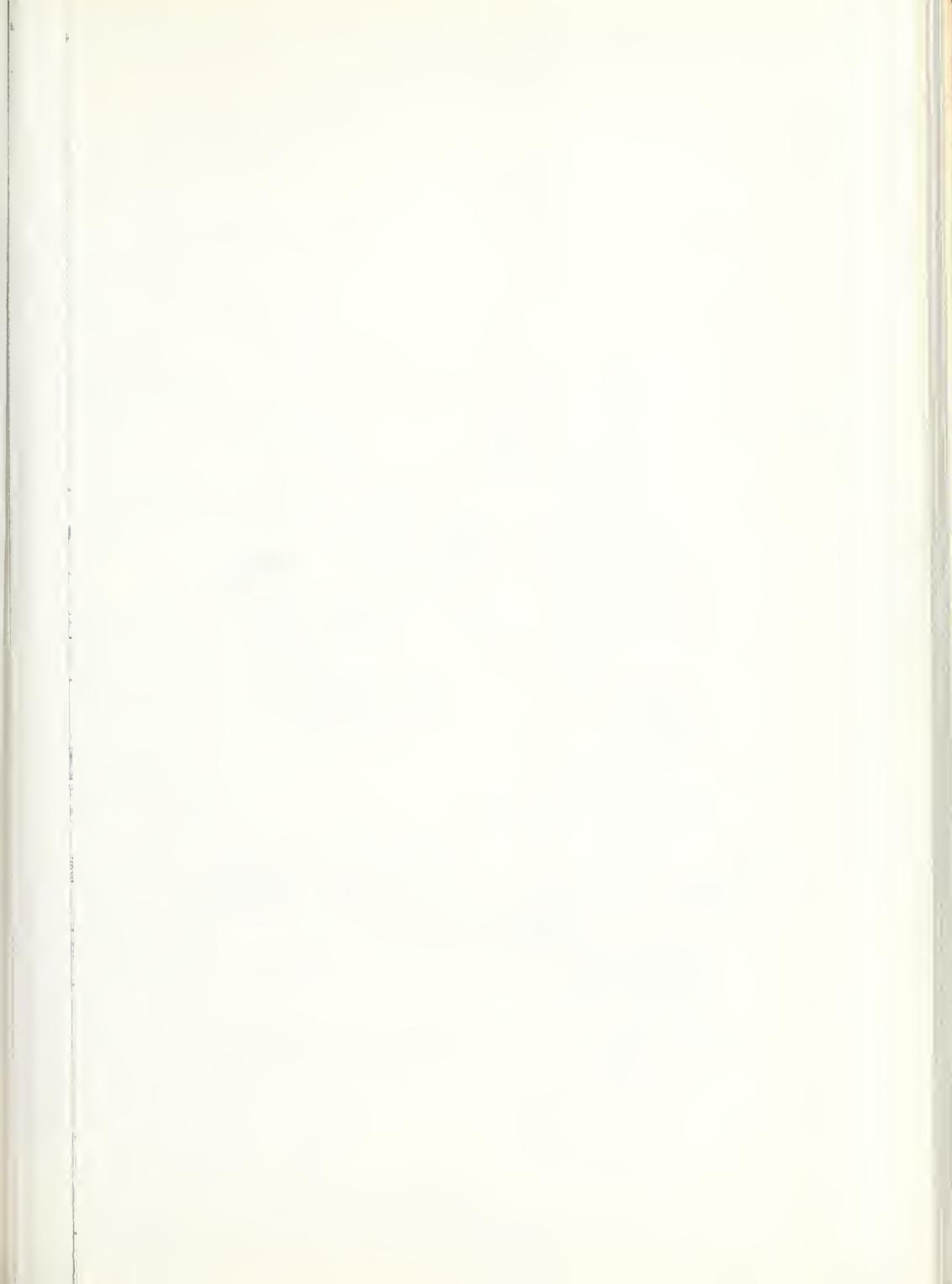


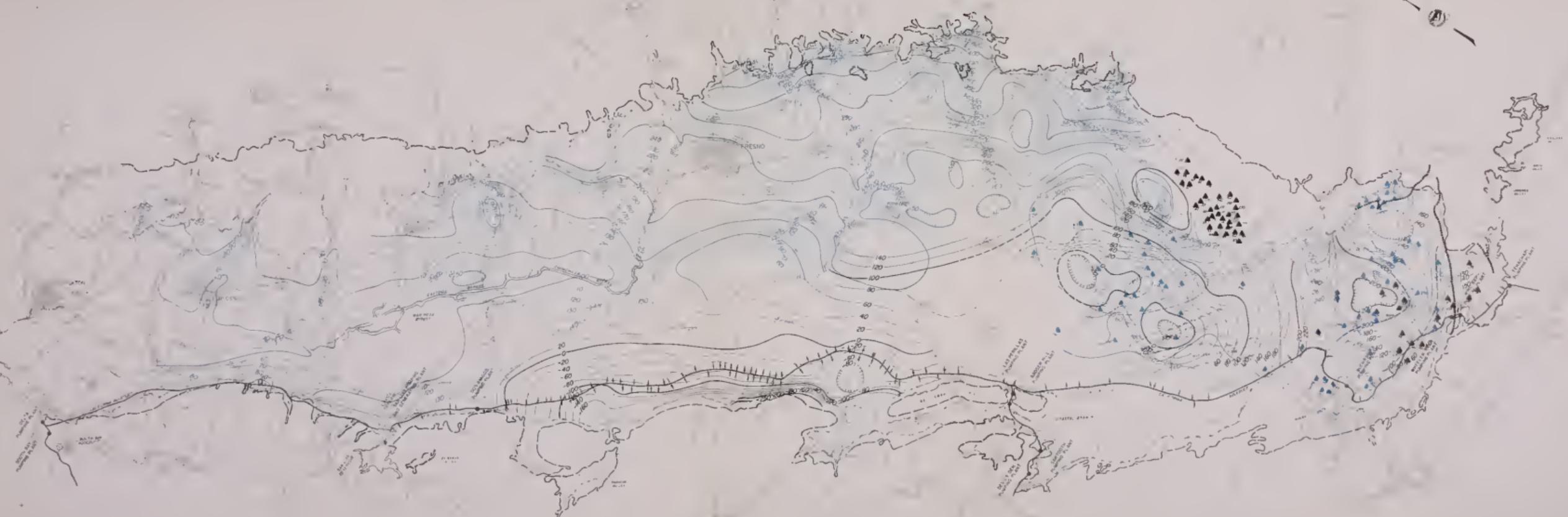
HISTORIC DATA PRESENTED
IN FIGURE C-1 FOR FOLLOWING AREAS

- 1 MACERA
- 2 FRESNO
- 3 CONSOLIDATED
- 4 CENTERVILLE BOTTOMS
- 5 ALTA
- 6 IVANHOE
- 7 OUTSIDE IVANHOE
- 8 MILL CREEK
- 9 TULARE
- 10 ELK BAYOU
- 11 LINDSAY-EXETER
- 12 TULE RIVER
- 13 LOWER DEER CREEK
- 14 MIDDLE DEER CREEK
- 15 DELANO-EARL MART
- 16 MCFARLAND-SHAFTER
- 17 ROSEDALE
- 18 ARVIN-EDISON



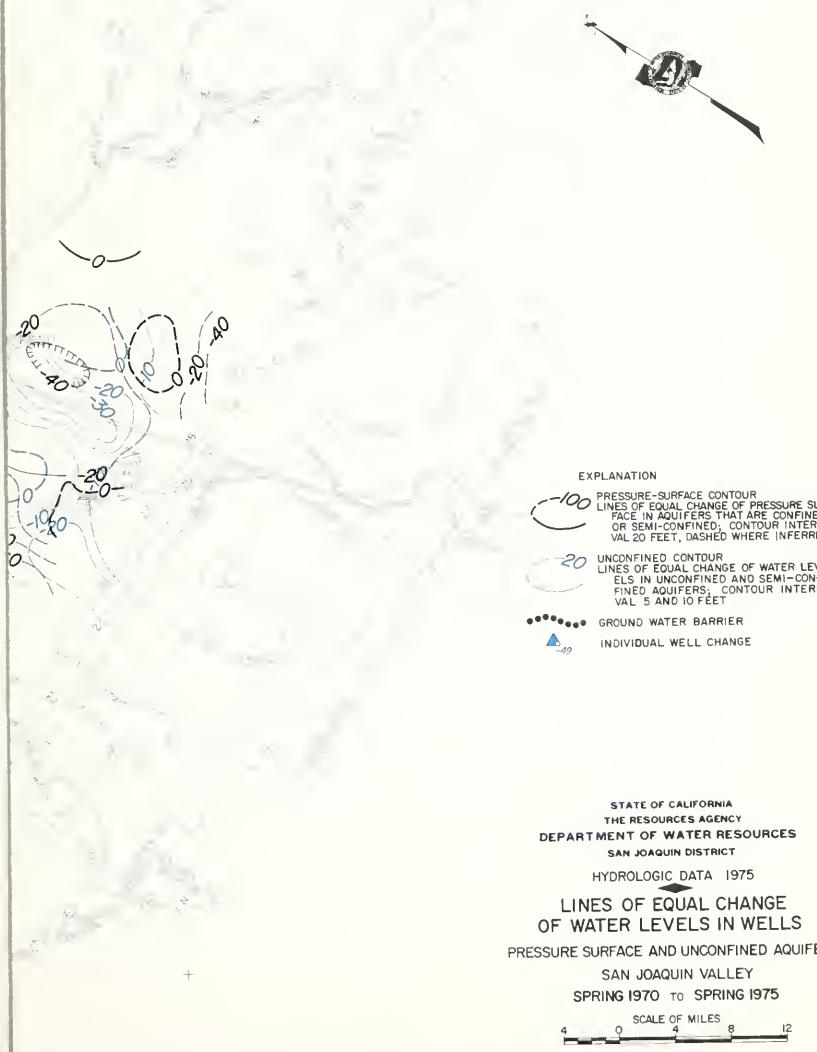


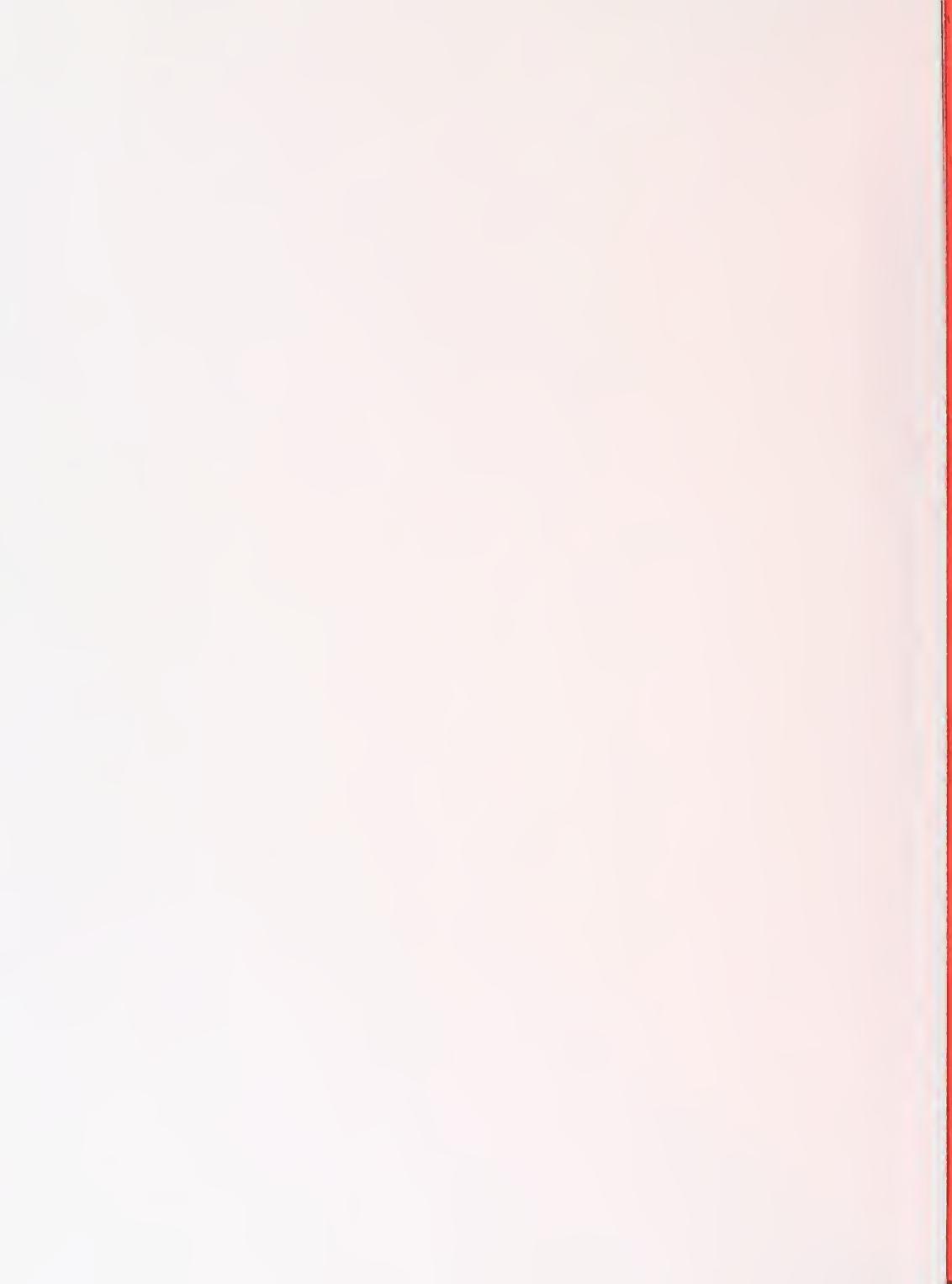


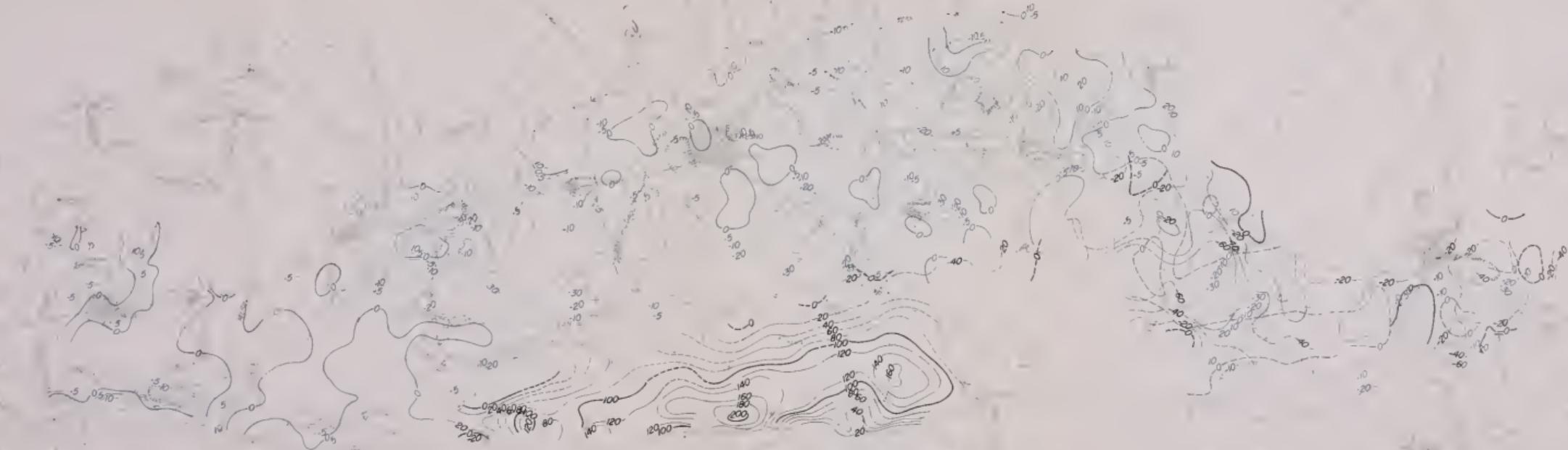


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN DISTRICT
HYDROLOGIC DATA 875
LINES OF EQUAL ELEVATION
OF WATER IN WELLS
SAN JOAQUIN VALLEY
SPRING 1975
SCALE OF MILE



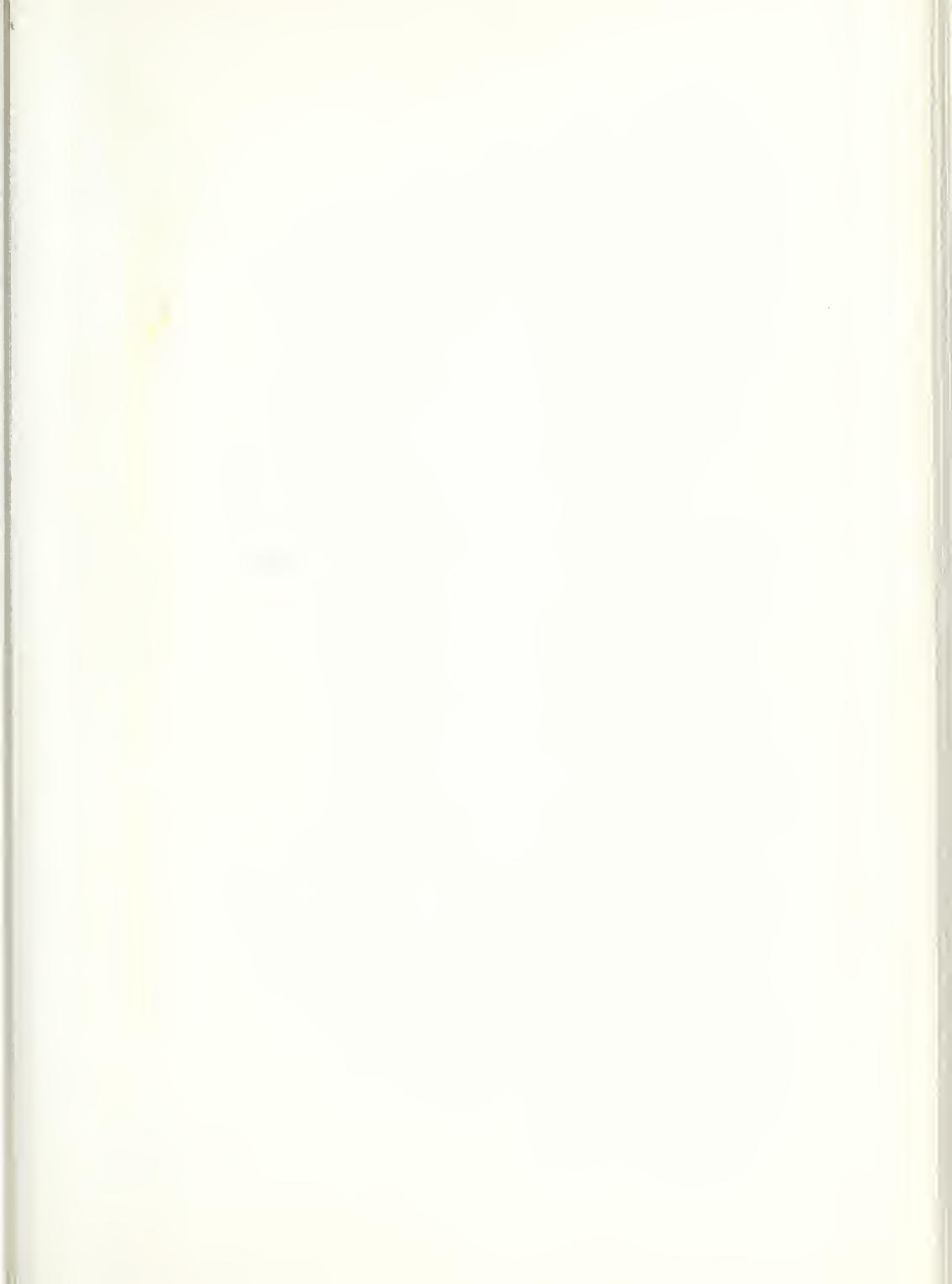






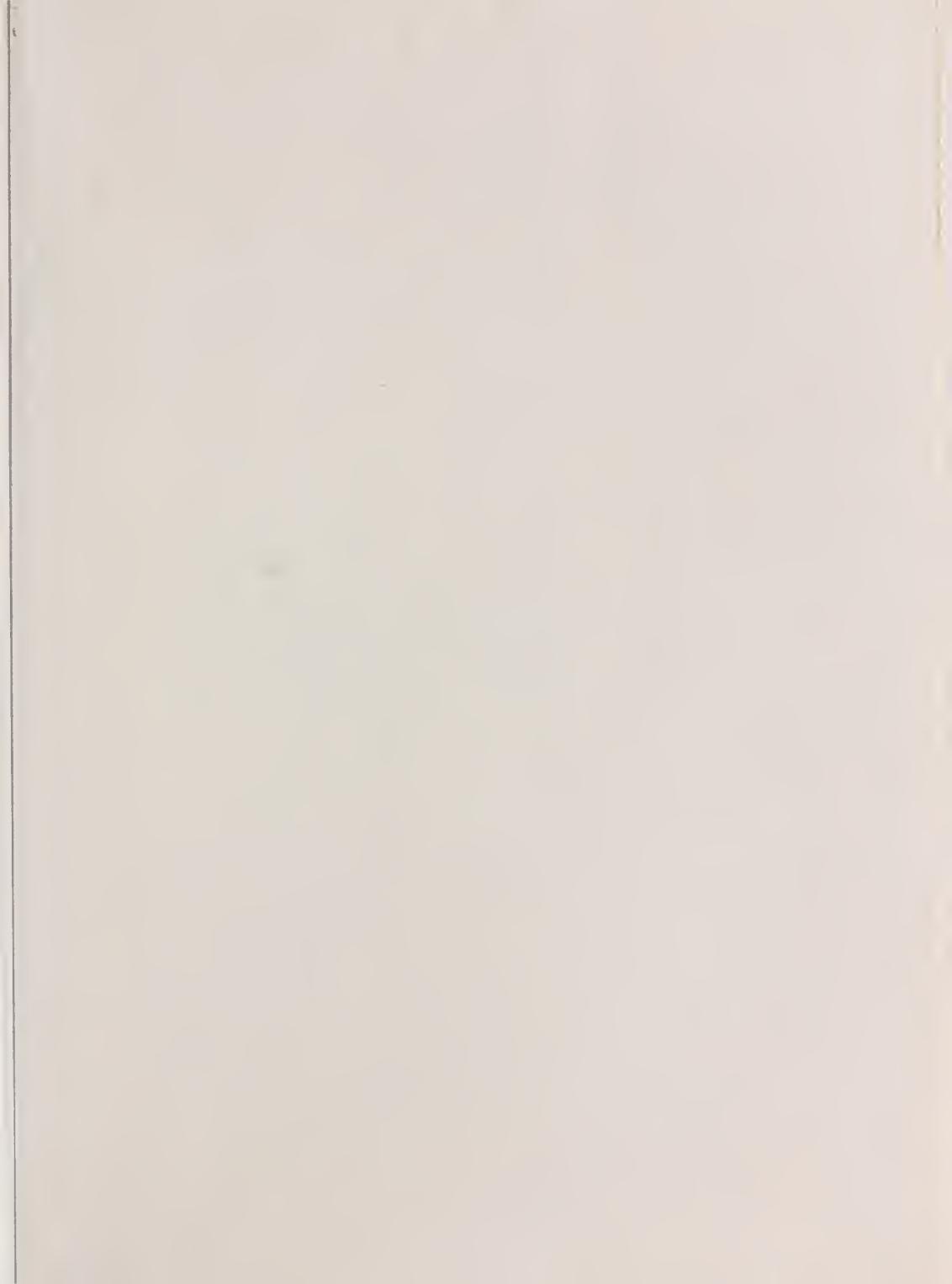
STATE OF CALIFORNIA
THE RESOURCE AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN DISTRICT
HYDROLOGIC DATA 1975
LINES OF EQUAL CHANGE
OF WATER LEVELS IN WELLS
PRESSURE SURFACE AND UNCONFINED AQUIFERS
SAN JOAQUIN VALLEY
SPRING 1970 TO SPRING 1975
SCALE OF MILES











THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

JUN 15 1982

BOOKS REQUESTED BY ANOTHER BORROWER
ARE SUBJECT TO RECALL AFTER ONE WEEK.
RENEWED BOOKS ARE SUBJECT TO
IMMEDIATE RECALL

OCT 2 1980	JUN 30 1987
AN 7 1988 RECEIVED	
RECEIVED	JUN 25 1987
DEC 1 1980	
PHYS SCI LIBRARY	DEPT OF PHYSICS
RECEIVED	APR 3 1998
JAN 6 1986	
APR 20 1986	RECEIVED
PHYS SCI LIBRARY	FEB 17 1998
JUN 20 1986	Physical Sciences Library
MAY - 1 1986 REC'D	
RECEIVED	
MAY 2 1986	
PHYS SCI LIBRARY	

LIBRARY, UNIVERSITY OF CALIFORNIA, DAVIS

D4613 (12/76)



3 1175 00565 5769

